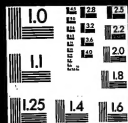


CENTIMETERS



14:1

Thomas A Edison Papers

A SELECTIVE MICROFILM EDITION PART V (1911-1919)

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Editors

David A. Ranzan
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Janette Pardo
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**Thomas A. Edison Papers
at
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START

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**NOTEBOOK SERIES
NOTEBOOKS BY EDISON
AND OTHER EXPERIMENTERS**

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 13
Notebook, N-16-05-10

This notebook was used by Edison during May 1916 for notes on experiments to improve the manufacture of disc records. The entries at the beginning of the book give additional information on experiment 1065E, described in Book No. 12. The subsequent entries pertain to experiments 1077E through 1096E; there are also lists of other experiments to be performed. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted, along with the title of the musical selection used in the tests. Also included are notes on "drop tests" in which records were dropped on the blotting pad of Edison's desk to test their fragility. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or Archie D. Hoffman. The front and back covers are labeled "No 13." The pages are unnumbered. Approximately 100 pages have been used.

12
11
10
9
8
7
6
5
4
3
2
1

100
91
83
75
66
58
50
41
33
25
16
8

67150

Home Co.,

MFG. STATIONERS,
96 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

1065 E May 10th 1916

1522 Blank

4 Fibre

3 Chalk

1 Shellac

First 2 rounds all
numbered put away
for time clock
May 10 / 16

700 lbs on the Rubber 600 lbs on
the final big press making blank

Printed two rounds - Hoffmanns
number for this blank is 1522

Used standard schedule -

Schedule = Bring to contact needle
off pin, When temp reaches

200° Fahr put on 850 lbs pressure
and hold for 12 min, Cool down

Cold. Varnish schedule 3 coats
baked one hour after each coat

130° deg Fahr Edge. Stand vertical
12 in rack oven has circulation

of air, Blank rise at hole
reamed flush,

Drop Test.

Dropped flat from height of 5 feet on my desk blotter laid on hand floor

#	1	13 Times	Dropped several edge
2	7		down but they will
3	20 - limit		not break this way
4	13		neither will they
5	13		chip out
6	8		
7	1		
8	10		They edge OK also
9	13		number OK -
10	5		They buff all right removal
11	12		of dust improves surface
12	10		slightly

Tested Surfaces

Discards	0	These surfaces are fine & as good as moulds will probably give on any blank
dust pass	0	
Good	1	
Fine	5	
Very good	10	
Very Very good	4	
Tracked	W-VV-W-VV	

Varnished by man in music room

1065 E Continued.

1522 Standard Sch
Press 42

1522 Std Sch
Press 42

OK
OK

OK
OK

Com OK Edge to V

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Com OK Vencer to

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

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OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

91%

Joobie

low varnish spot & dia
low moulds

Spec 010 at edge

83%

Joobie

May 10-1916—
1065 Continued.

With so much Chalk we must be careful
that our Varnish is not Acid as it will
attack the chalk & make CO_2 gas.

After numbering Varnishing and
Washing the surfaces have improved
Very Much nearly all are Very V good
and some rated VVV good

Eye inspection is all that is required
and Mould inspection —

Blanks I measured tonight
are a little dished —

3rd Round surfaces fine even without
Buffing or Washing →

Veneer 3 coats on face
of blank is too thick

Dipped 1st Round record which
was numbered washed -

Was in water 8½ hours swelled
up very bad at edges + broke
sections, but every part of
music OK no points or tit
holes swelled - The record
was very poorly shellaced
not shiny - Edge swelled
very much more than 1519

Try better varnishing + retest
also get better water proofing

Van in Music room

1522 3rd Dup
42 Press

Veneer V Discard
OK

OK

OK

OK

OK

OK

Specs
OK

Specs
Specs

Low Varnish
Low Varnish

OK

OK

OK

OK

66%

Footnote

1065 Varnish in Music R

4th Dup 1522-

Press 42

OK

OK

Spec 058
OK

OK

OK

OK

OK

OK

OK

OK

OK

Low Veneer 16
OK

Low spot
Spec 050

83%

Irish Rose

1065
5th Round
Press 42

OK
OK

Specs start of music
OK

OK
OK

Com Edge - Y $\frac{1}{2}$

OK
OK

OK
OK

Specs $\frac{1}{2}$ " middle music
" op

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

88%

Irish Rose

1065
6th Round.
Press 42.

OK
OK

OK
OK

Specs start of music

OK
OK

Low Vannah

OK
OK

Specs 1" area
mould removed

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

75%

Irish Rose

9th Round 1522 Press 42 - Irish Rose

OK
OK

OK
OK Sheets $\frac{3}{4}$ area, Center $\frac{1}{2}$ " in from End Music Rosary 14

OK
OK

OK
OK

OK
OK Struck on smooth at End music Irish R 141 - made example

OK
OK

OK
OK Spot $\frac{1}{2}$ End music made not low Just for today # 28

OK
OK

OK
OK Spot $\frac{3}{4}$ x $1\frac{1}{4}$ last end music - Just for today 63

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK Discard Var V to feed line Mott Rock - 56

58%

10th Round 1522 press 41

OK
OK

OK
OK

OK
OK

Discard Veneer V $\frac{1}{16}$ from feed line.

OK
OK

OK
OK

Comp Edge V.

Comp
OK

Comp
OK

Comp
OK

Veneer V $\frac{1}{16}$

Turn $\frac{1}{4}$ in from start of music

Discard - Crushed Edge bad.

OK
OK

OK
OK

OK
OK

Discard, Veneer V comes within $\frac{1}{8}$ " feed line.

66% Tootsie

11th Round 1522 press 42 lat 20
var Opr B night -

Com Edge 8 in
OK

Spice in Mangin

OK

Spot next label 3/4 dia smooth. Moulded

OK

Label pulled out at edge & near hole

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Discard-blank crushed to within 1/8" of feed
line but in place

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

58% Irish Rose

11th Round 1522 press 42 dot 20
var Apr 13 night -

Com Edge 8 in
OK

Spars on Margin
OK

Spot next label 3/4 dia smooth. Mould OK
OK

Label pulled out at edge & near hole
OK

OK
OK

OK
OK

Spot 3/4 dia next label not in mould
OK

OK
OK

OK
OK

OK
OK

Discard blank crushed to within 1/8" of feed
line but in place
OK

OK
OK

58%. Irish Rose

Moore took #10 Moon defect
to Examine Mould -

12th Round 1522 Lot 20 Press 42

1 OK
OK

2 OK
OK

3 OK
OK

4 OK
OK

5 OK
OK

6 OK

7 OK
OK

8 OK
OK

9 Com Edge $\frac{1}{8}$
OK

10

Low spot - Low mould - small area

Big spot $\frac{5}{16}$ wide follow edge of label & span for 3"
to moon shaped
other side shows light spot

Brush Rose, 80%

13th Race 1522 lat 20 -
Var Opn #4 Nights


1 


2 


3 

4 


5 

6  Space 010 last line on must

7  Space 100 of music space 100 of music

8  Prints but big oval clear across label
+ $\frac{1}{8}$ " from Music on opposite side
flinch - OK but should only
lunch around - Disc OK

9 

10  Prints has big oval clear across label
just like 100 - Disc OK

 Con

Vince - 26



88%

Tootie

Note 7 low mould

14th Round 1522 lat 20 Press 42
Van Oker # 4 Nights -



3 spec: Center of music - think pull out
spec: 1/2" from end of music 3 of 10 - may be pull out

7 Bare spot behind eye 1 1/2 in music low mould

Bare spot in label + hills on outside

Low Mould


83 1/2


15th Round 1522 Lot 16 -
 Press 41 - Van of #3 nights


1 

2 

3 

4  Vencer V V V $\frac{1}{16}$


5  Big Area spec - Center of area $\frac{5}{8}$ in from end
 Mould ok

6  Spec. fms. at end of music Mould ok

7 

8 

9 

10  $\frac{1}{4}$ spot at Edge of label.







83%

Toothic
 #2

16th Round 1522 (at 16-

Press 42

Van Spr # 3 night

5 Start
class op at edge small

6 

7 

8 

9 

10 

11 

12

Corn
OK

 Veneer +

17-

87

Insul Rock

17th Round 1522 to 1872

Prsas 41 -

Chr 3 nights

1



Discond Veneer - probably Crashed under

2



3



4



5



6



7



8



2 edge 1/8

Veneer

Note 6 saw-mounted

1st Recd 1522 Ref 18
Press 41 for 3 nyls

1 Com Venues $\frac{1}{2}$

2 OK

3 Com 2dgs Y

4 OK

5 OK

6 OK Spot. 8/8 in from End Music "Low Mound"

7 Com Edge

8 Com Edge

9 Com Venues $\frac{1}{2}$

10 OK

Recd - Venues - think cause is crossed edge

OK Com Venues

OK

Tactile





83%

18 Rounds

90 defective surfaces
many ok — of the 90
60% are pull outs —

Can edge down to
1/4" of 1st feed line —

18th 1522 Lat 18 Spr 3 mple.
Press 42 —

7. Low 1/2" in from end music
OK
8.  OK
9. Low Spot 2 of them 5/8" in from end music
OK
10.  OK
11.  OK 1/2" in last part of music
12.  OK

50%

Dush Rose 18

NOTE

By studying 12 Records under Micro at point where most of our discards take place which is last $5/8$ of music + part of smooth part. I find that contrary to supposed poor print that they are perfectly filled - and that the specs are really PULL OUTS. I then went up stairs to ask if they had many stick to mould at that particular point. The man said yes

that is the point where most of
the sticking takes place, + he
had kept an account of them

Hereafter I will get this record
for each Round

Arrange Card 1 to 12 + have
man mark each mould +
position,

4 Rounds on 1519 Varnished in
Fred Otto Machine, The only
defects were pull outs on the
mould,

~~19th Round~~

See book 12

1075 E is 1522 blanks
& should have been

put here


4 Rounds fired 6th. Vennery
with Machine -

83% 66% 100% 55%
pull out the whole trouble

Edges turn up a little
all night in water
didn't shell out
just slipped

229

Notes for Experimenting Etc

- 1 = Get black Vars get black & shiny to
Cut pull out in label. the solvent one
that dissolves shelles if possible
- 2 = Rotate a numbered record so its
Edge touches in Repose, which
should be absorbed then shelles over
this. Try Matted Vaseline -
test in water shell out or not shell out
- 3 = Buff several discs until a
satisfactory gloss is attained
when ok. Buff one round
of mounds & continuously print
to see if Pull Out O Cap
- 4 To stop pull out. Tap mounds
Edgewise in 4 places 
to see if it will not prevent
Pull out.
- 5 = Have 2 men day 2 night take
rounds at Random from
def press & record same as
I have been doing -

This work

Reg

Ready work
ok

worked ok

Notes Continued

6 = I wonder if knocking out
pin moves moulds + breaks
side walls -

7 = in 10 hours 1 Baking Rack
will gives 90 records in 10 hours
1 Coat Requiring for 16000
Records 174 Racks for 3
Coats 531
if any night work, then reduction
in number of racks will be
in proportion - find number of
racks we have.

8 = Fred Off by 4 Rounds
with the time between,

9 = Arrangements for plain report
Sent to me of the number
of 1519 + 1522 Blanks made
daily

Notes Continued

- 10 Have daily report sent me
of number of 1519 & 1520
Records Printed daily -
- 11= Have daily report of the
number of new blank
making moulds finished
daily +
- 12= Report daily number
of Varnishers by day &
night.

20th Round 1522 - 3 Coat baked (300°)
Press 41. Below label

1 spec - pull out end minor
OK

OK

1 pull out
pull out } op

Com Veneer $\frac{1}{2}$
OK OK

Com Veneer $\frac{1}{2}$
OK

OK

OK

OK

OK

OK

1 Discard, Edge

OK

OK

75%

91 method PO.

Just in

1522

21st Round 42 pieces

Discard V Edge
OK

Can OK Edge V just clean up $\frac{1}{16}$

Can OK Edge V. not out,

OK
OK

OK
OK

Bad print { not filled - not of Pull out
Bad print

Big Pull Out for But OK don't sound
" " " " " "

OK
OK

Bare spot

OK venter compelled

OK
OK

OK
OK

Can OK venter $\frac{1}{16}$

Irish Rose

66%

(45)

22nd Round 41 Press

~~1~~ Pull out
Pull out can hear

~~1~~ Pull out
pull out "

~~1~~ Pull out -
OK "

~~1~~ Pull out
OK "

OK
Com Edge ok within $\frac{1}{8}$ "

Com
OK Vener $\frac{1}{8}$ ok

Com
OK Edge $\frac{1}{8}$ ok

OK
OK

Com
OK Vener $\frac{1}{8}$

OK
OK

OK
OK

OK
OK

66%

Tootie

23 Rows 42 pieces -

1 Pull out - Sound

OK
OK

1 Pull out Dont sound

OK
OK

1 Pull out - Dont sound

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

45

914

1 real Rose

Hoffman
Output

5-12-16

5-13-16

1519

1125

1125

1144

1522

1128

1522

950

24th Round

522-

Press 42 -

|| Pull out - Discard Low heat

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

|| Pull out - Discard spot very little print
|| Pull out OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

83%

Yush Rose

24th Round

1522-

Press 42 -

|| Pull out - Discard can hear

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

|| Pull out - Discard spot very little print

|| Pull out OK

83%

Irish Rose

25th Round Press 41
Load 2

1522

OK
OK

OK
OK

Vineer - Discard - within 3/16
OK

Vineer stretched. Will clean up (OK)
OK

Don't Edge V.
OK

OK
OK

OK
OK

Don't Edge V.
OK

Pull out - Discard - Sounds
OK

Pull out - Discard - "
OK

OK
OK

Pull out poor prints
OK

58%

66%

Tactic

26 Round 42

Press

Pull out 1 Cantleas (OK)
Pull out " (OK)

(OK)
(OK)

Pull out = Bontina (OK)
Pull out = (OK)

(OK)
(OK)

(OK)
(OK)

Base spot - Discard

(OK)
(OK)

(OK)
(OK)

(OK)
(OK)

Pull out - Bontina (OK)

(OK)
(OK)

(OK)
(OK)

(OK)
(OK)

Discard - Edge creases

(OK)

58%

Irish Rose

27 Round 41 Press -

Round Edge V

(OK)
(OK)

(OK)
(OK)

Com

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Round Edge V

(OK)
(OK)

(OK)
(OK)

Com

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

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OK

OK

OK

Round Edge V

(OK)
(OK)

(OK)
(OK)

Com

OK

OK

OK

OK

OK

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OK

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OK

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OK

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OK

Round Edge V

(OK)
(OK)

(OK)
(OK)

Com

OK

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Round Edge V

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(OK)

(OK)
(OK)

Com

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Round Edge V

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Com

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Round Edge V

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Round Edge V

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Round Edge V

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Round Edge V

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Round Edge V

(OK)
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Round Edge V

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Round Edge V

(OK)
(OK)

(OK)
(OK)

Com

OK

OK

OK

OK

OK

OK

28th Run. 1522
42 Press

Com OK Edge Crushed

Discard Spot Discard

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

83%

Irish Rose

29th 1522
Press 41

pull out Discard 3 Run OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

83 -

Justiz

91

30th. ¹⁵²² Note
Press 40 load 1..5

OK
OK

Pull out out mood

OK

OK
OK

Edge Discard

OK

Pull out Discard

OK

Parasport Discard

OK

Pull out Discard

OK

Pull out Discard

OK

Veneer Discard

OK

Com Edge 1/5 Long

OK

Pull out

OK

33%

Swiss Army
Eve 12th

31 - Press 41 load 2

OK
OK

OK
OK

OK
OK

OK
OK

Pull out

OK
OK

Com

OK
OK

OK
OK

OK
OK

OK
OK

Pull out 2 places

OK
OK

OK
OK

OK
OK

83

Loose

2

OK
OK

OK
OK

100%

32 1522

Press 42 -

OK
OK

Pullout Discard

OK

Pullout

Pullout

OK

Pullout

Pullout

Discard

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

58% 66%

French Rose

33- 1522

Press 42

OK
OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Com Vencer 16

Com Spout (how Vencer Discard)

Pullout Discard

Pullout

Pullout

Com Vencer 16

Pullout

Pullout

75 - 91

French Rose

5-15-16

Hoffman has

106 Bottom

139 Tap plates

Has running 1 leg on 106 but
gives no margin to wash

Requires 130 Moulds per leg

Press 42-

1 X

2 X

3 X

4 -

5 X

6 X

7 X

8

9

10

11

12

66%

780
139
641

42-

9-

34- Press 42

Baris spot down

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Com. Press 1/6

pullouts

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

83%

91

Y. M. Rose

35- Oiled Moulds AB 5%

42 Press -

near label

Discard - Oil on mould

" " "

oil on mould near label

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Oil

pull out
pull out

OK
OK

75

83

Using 5% Resane in Gasolene
 Dug out pit deep in soil + rub
 quickly over whole of
 mould then wipe
 dry

No advantage

36 Round

OIL

Press 42

Load 2

OK
OK

pull out bag area
OK Discard RO

pull out, load
OK Discard

pull out, load

OK

OK
OK

pull out, load

OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

66%

Lactaria

37-

OIL

42 Press

pull out OK
pull out Discard

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

66%

Lactaria

B = 8 Blanks

OK
OK

OK
OK

OK
OK

BUT Blank OK -

pull out loud.

OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

75%

Toohis

A = 10 blanks low

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

pull out ferns / David

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

70%

Tootsie

80%

1078E

High ~~Low~~ Tins will do
should be made different
cut away to get
the outside

1522 blanks Vern by OK

Machines - Tin Cans all
throw - Low Tin 10 mark

A 3.5 cc coat

High Tins mark B

Tins not cut out

10 blank of A 8 blanks of
B.

Evidently Tins will do
Think High Tins best
Tits dont show -

It may be Ferns is a specialist
of tins - many require 1 1/4 @ 1 1/2
hours between coats baking

Reprints

Press 41

1 ☒ OK **XOK**
disturbed both
OK all

2 ☒ OK **XOK**
pull back
too many snags
disturbed both
over infirmities

3 ☒ OK **XOK**
poor bond
too many
snags

4 ☒ OK **XOK**
Air-Edge
near

5 ☒ OK **XOK**
near spot Discard

6 ☒ OK **XOK**
Bad Print / Dis

7 ☒ OK **XOK**
Conn Edge to **XOK**
OK

8 ☒ OK **XOK**
pull back / Discard

9 ☒ OK **XOK**
pull back / Discard

10 ☒ OK **XOK**
pull back / Dis

11 ☒ OK **XOK**
OK

12 ☒ OK **XOK**
OK

13 ☒ OK **XOK**
OK

14 ☒ OK **XOK**
OK

15 ☒ OK **XOK**
OK

16 ☒ OK **XOK**
OK

17 ☒ OK **XOK**
OK

18 ☒ OK **XOK**
OK

19 ☒ OK **XOK**
OK

2nd Round
41 press -

1 ☒ OK **XOK**
pull back
OK

2 ☒ OK **XOK**
too many snags
OK - Diamond
breaks the
Rule -

3 ☒ OK **XOK**
OK

4 ☒ OK **XOK**
OK all over X Discard

5 ☒ OK **XOK**
spec Discard

6 ☒ OK **XOK**
pull back / Discard

7 ☒ OK **XOK**
OK both halves

8 ☒ OK **XOK**
snags Discard

9 ☒ OK **XOK**
air / Discard

10 ☒ OK **XOK**
air

11 ☒ OK **XOK**
air

12 ☒ OK **XOK**
air

13 ☒ OK **XOK**
air

14 ☒ OK **XOK**
air

15 ☒ OK **XOK**
air

16 ☒ OK **XOK**
air

17 ☒ OK **XOK**
air

18 ☒ OK **XOK**
air

19 ☒ OK **XOK**
air

20 ☒ OK **XOK**
air

21 ☒ OK **XOK**
air

1079E Reprints

Two rounds. 1522 Prints

Rearmished by Ott with
Machine - Ring 3 Coats
5st CC - baked hair
between each Coat

Trouble is air between
first layer + last.
it rises up + gives a
spot 030. The diamond
comes along + breaks it

16%
Totals

3 OK
25%
Tapsie OK

42

Press 42

old afirest hurt. would

OR



OK
Barespat Nicard
OK



6. 6. 6.

Big areas PO OK OK

OK

11 ☒ OK down blank or Vorn
12 ☒ OK

SK

ॐ

1

75%

83

Irish Rose

143

Noted

Press 41

pull out spec
Vener

Barisport $\frac{1}{10}$

OK

OK
OK



pull out

pull out / Dir
" " "

OK
OK

10

OK

OK

OK

66%

53

Testide

42- Not Oiled

Press 41

OK
OK

↓ Pullout / Dis
OK

OK
OK

↓ Bare spot Dis
Spaced

OK
OK

↓ Cam Edge V $\frac{1}{8}$

OK
OK

OK
OK

OK
OK

OK
OK

↓ pullout OK OK

OK
OK

↓ pullout Dis
OK

66

7/5

Isotonic

Rad 43

no oil-

Press 41
Note

OK
4411 @ 2-1
4410-a 1-6

Not Buffed
4411 2-4
4410 1-21

2+1
176

OK
OK

4411-10

2x4
1721

↓ pullouts Discontinued

↓ pullouts Discontinued

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

↓ pullout of Discontinued

OK
OK

OK
OK

75%

Isotonic

1080

C Varnish

2nd Round Press 41

Crim Edge 1/2

OK
OKOK
OKOK
OKOK
OKone yellow spec. nothin' OK
" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

" " " " OK

50%

2" long 3/4 wide

at angle -

same Reason for this

NO PULLOUTS

Probably bubbles greatly diminished by
a longer bake 3 or 4 hours. angle Cent
of that work.Varnish flows
out on rim of mould
Easy to clean - Mould
free of pullouts -

44

Press 41

1522

Notes

OK
OKOK
OKPullout
OKPullout
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

75

91

Loose

45

42 Press -

Oiled

Bare Square Edge
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

58

83

Brush Rose

Apparently Nothing
in grafting
Blanks or polishing
or Buffing would

1081E

Press 41 - Having the 2 buffed discs

Edison Pressed 12 Varnish
blanks with graphite - used cloth
2 Coats,

pull out Disc. Think I dug piece out within
OK

OK
OK
OK

pull out Disc. Not brief check

pull out Disc. OK

OK
OK

pull out Disc. OK

OK
OK

OK
OK

pull out Disc. OK

OK
OK

OK
OK

58% 66%

Isotopia

2nd Round Brass 41

OK
OK

OK
OK

OK
OK

Pull out
OK

OK
OK

OK
OK

Vener 1/4 Descend
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Pull out
OK

OK
OK

75

91%

Tactis

1082 Moore Expt

1522 - 3 bakes then Extra Coat of Indium
or 7 inches, which is baked

2nd Round

Press 37.

Bare spot near edge
OK

pull out near edge
OK

pull out middle mass
OK

pull out near end mass
OK

OK
OK

OK
OK

OK
OK

OK
OK

pull out near label
pull out

OK
OK

OK
OK

OK
OK

pull out
OK

58% new load

Bare spot 1/2 barrel
OK

Bare spot stout
OK

Bare spot middle mass
OK

Bare spot at label
OK

pull out OK
pull out OK

OK
OK

pull out Dis
OK

Bare spot 1/2 in
pull out

OK
OK

OK
OK

OK
OK

Down vane 2
OK

down vane 3-5
bare spot OK

33%

See over

Round 2
2nd Round 1082 E phase 41

↓ pull out Dis

↓ Bone spot Bar/Label (OK OK)
Bone " End Messors

↓ pull out spec Dis

(OK OK)

(OK OK)

(OK OK)

↓ spec pull out Dis Not Buffed

↓ pull out spec - bar/spot Buffed

(OK OK)

↓ spec pull out

↓ pull out Dis

(OK OK)

41%

(50)

Toalsiz

M

1083- 1522-
1st Round Press 41



1 side Postn 1



1 side Postn 3



1 side Postn 3



1 side = 3



68%

Isotonic

Moore's test of vomiting
just thru after 1082E
gave 50% + 37%

2nd Round

42 Press



1 side Postn 3



1 side postn 1



both side - 1 3



45%

Brush Row

5 in Postn
3 in Postn
2 in Postn

1083E

24 = 1522



3 Coats Varnish as above -

This looks like an improvement,

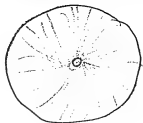
Think wants Enlarged hole to give air vent

Made No Ear test of Discards

1084E

24 of 1522

Varnished radially -



1st Round
Press 42 - Load 3-

- 1 ☒ OK
- 2 ☒ Snaps Dis
- 3 ☒ Snaps too many
- 4 ☒ Snaps too many
- 5 ☒ Snaps OK
- 6 ☒ OK
- 7 ☒ Snaps OK
- 8 ☒ Com Edge 1/2
- 9 ☒ Time Dis
- 10 ☒ Snaps Dis
- 11 ☒ OK
- 12 ☒ Com Press 1/2

41% 58%

Inch Rose.

2nd Round 1522 (at 3:10)

42 Press

- 1 ☒ OK
- 2 ☒ Snaps Discard
- 3 ☒ Snaps too many
- 4 ☒ OK
- 5 ☒ OK
- 6 ☒ OK
- 7 ☒ Snaps OK
- 8 ☒ OK
- 9 ☒ Com vineer 1/4
- 10 ☒ Com vineer 1/2
- 11 ☒ Low spot OK
- 12 ☒ Com Edge 1/2

66%

Tostina

1085 E

Two rounds 1522

Change the schedule on
this lot thru

Bring to Contact & put 200 lbs
pressure on then put steam
on & when temp gets to
200° deg put 850 lbs
on for 12 minutes - Cool
Cold

Don't appear to do
any good -

1086 2nd Round blank
41 Press 1525

OK 1 Spac 3

OK Spot 3

OK

OK

OK Spec spat $1\frac{1}{2}$ 3

OK Spec spat $1\frac{1}{2}$ 3

OK Spec spat $1\frac{1}{2}$ 3

OK " " $1\frac{1}{2}$ 3

OK Spec spat $1\frac{1}{2}$ 3

OK " " $1\frac{1}{2}$ 3

OK Spec spat $1\frac{1}{2}$ 3

OK " " $1\frac{1}{2}$ 3

OK

OK

25% "

1st Round 41 mm

OK Edge $\frac{1}{4}$

OK

OK

OK Spec area $1\frac{1}{4}$ 3

OK " " $1\frac{1}{4}$ 3

OK Edge $\frac{1}{4}$

OK Spec area $1\frac{1}{2}$ 3

OK " " $1\frac{1}{2}$ 3

OK

OK

OK big spat it went 3mm 3

OK Spec spat 3mm 3

OK Spec spat 3mm 3

OK Spec area $1\frac{1}{2}$ 3

OK " " $1\frac{1}{2}$ 3

OK

OK

58%

1086 E

Heffman

Make 4 Rounds 48 blanks
like 1085 E no hammers
but instead of 600 lbs
final pressure in big press
only give them 50p
These 10824" covers hand

5.1 p/c for 1st Coat
3.5 the other 2
This will be least 2

Press 39 - Extra load -
This is accumulating Y -
Run Reg -

OK
OK

OK
OK

pull out. Discards

pull out
OK

OK
OK

Com. vases &
OK

OK
OK

pull out
OK

OK
OK

57

85 ps

1097E Moores Exp

Look 12 1522 blanks
Put at Contact, needle off
When 200° deg reached
Cut off steam - Cooled
Iron Cold - Took out

5- The other Y he
printed Reg again by
putting back in pieces
The 5 were 3/4 printed
& came away from needle
surprisingly well although
very hot condensed -

Blanks use were defects
having spots on them

46-Reg 1522 Notes
Press 41 - Load 2

- 1 - Pullout OK
- 2 - OK Buffed Mandol
- 3 - OK
- 4 - Pullout Dis
- 5 - Pullout Dis
- 6 - OK
- 7 - OK
- 8 - Pullout OK
- 9 - OK Pullout OK
- 10 - Pullout OK
- 11 - Pullout OK
- 12 - Veneer disassembled Not Buffed

41%

75%

Tooth

47 Reg 1522 -
Press 42 - Load 3

- 1 - Edge Discard OK
- 2 - OK
- 3 - OK
- 4 - Pullout Discard OK
- 5 - Corn Edge OK
- 6 - OK
- 7 - OK
- 8 - OK Pullout OK
- 9 - Pullout OK
- 10 - Pullout OK
- 11 - Corn Veneer OK
- 12 - Corn Veneer OK

66%

83%

Irish Rose

1088 41 pieces

Round 1

OK
OK

OK
OK

3 | time space | op test 3

4 | group space | op sounds 3

5 | group fine space | test 3

6 | OK OK

7 | OK OK

8 | OK OK

9 | OK OK

10 | group pull out 3

11 | OK OK

12 | OK OK

66%

Loose

1088
Pieces 42

Round 2

1 | space group test 3
space fine sounds 2-2

2 | OK OK

3 | 2 time space test 3
OK OK

4 | OK OK

5 | OK OK

6 | space group fine test 3
OK OK

7 | group space fine test 3
OK OK

8 | OK OK

9 | OK OK

10 | OK OK

11 | Very fine group space test 3
OK OK

12 | Very fine space test 3
OK OK

50%

Grish

NOTE

5-17-16

1088 -

This technique is good
+ takes care of something
is mechanically correct.

Make 24 1522 blanks with
labels on - deliver to music

Room - Only 1 Coal in hole

3 on other part; Room bushing
hole deep so don't touch
Schedule Put at Contact
needle off pin - when
temp reaches 175 put
on 850 lbs for 12 minutes
Cool cold

NOTICE

This is an improvement
as all the discards are groups
of very fine pullouts scarcely
noticeable. This is also mechanically
right as it is not likely there will
be bare spots + large pull out

We must now get condition where
bar will anchor to blank sp. so it
will pull away from Monobles.
The label should be sunken into over

Hereafter - Spec area

1501

№ 2

No 3

Leibel

into blank at least 002 or 0025 not 001
We then can get label by using 2
Coats of Var,
We must get Var on 1st Coat to
go in deeper -

48 Reg 1522
Press 42 Load 3

1. OK
2. OK Pullout Discard

3 (OK OK)

4 水

4 (OK)
5 pull out (OK)
ink

6 Pullouts Discovered
OK

7 Rollouts Discard
OK

8

9 OK

10) com
ok ✓ miss 16

pull out OK

11 BR	(on)
End	66%


50%

66%

Irish Rose

Ngile Rocca
Press 41 -

1. Com Encl 3/16 -

2  species big area Dis.
" Position 3

3	<u>11</u>	Spato	"	3
		Spoke	"	3

4 Com OK received 3/16

5- Spot - Poolman 3 OK

6 (OK)
(OK)
(OK)

7 (OK)
(OK)

OK
Spe

Speed \rightarrow position 2 OK

1. 

2. Summary (Discuss) Part 3













5.04

46

Footnote

50th Round

Press 41 Load 2













- 1  Low spot postn 1
Specs ok
- 2  Spec Area Postn 2
ok Discard
- 3  Jam Postn 1
Spot " 3
- 4  Specs Discard
ok
- 5  Spec Postn 3
" 3
- 6  Spec OK 2
- 7  Snap Postn 2
ok
- 8  Snap Postn 3
" 3
- 9  Snap ok
- 10  Snap ok
- 11  Snap ok
- 12  Snap ok

25

33

Jaloni

51st Round

- 1 
- 2 
- 3  Long stroke Postn 3
Specs " 1
- 4  Effort " 3
- 5 
- 6  Spec OK 2
Specs OK 2
- 7  Spec 2G3
2G3
- 8  Spec 15F
15F
- 9  Spec 2
3
- 10  Spec 3+
3+
- 11  Spec
- 12 

41

75%

Qual Floor

Hereafter will
 record only by Eye
 No flaccid

No Consideration in OKs & discards
 with same moulds -

Have stopped numbering
 Moulds -

37 Rounds gives by Eye 63.24%
 Inspection by Ear gives 75.8%

12.56% More, 18000 nets 11376 Rich
 2268 Extra Records 13644

52

Press 42

Lowest point 20.2 Pm

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

53rd Round Reg 1522

42 Press

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

OK
 OK

Insch R

Insch Rose

54

Pinner 41



56%

Lester

55-1822-137

42 pinner



33%

Lester

2nd Round.

Is just as Bad.

From this it would seem that
180° was better

Notice the varnish stick to mould
is red, transparent showing no
lamp black -

Apparently it cooks up & has
very little hardener, & this
may be the trouble,

1089E

24 Reg 1522. 2 Rounds -

Put at contact needle just off
pin - When lamp gets up
to 300° Fahs put pressure at
850 lbs for 12 minutes.

PHENOMENON

Every Record stick horribly to the
Mould.

1	$\frac{1}{2}$ area both sides
2	$\frac{3}{4}$ - $\frac{3}{4}$ area
3	" "
4	" "
5	$\frac{1}{4}$ - $\frac{1}{4}$
6	$\frac{1}{2}$ - $\frac{1}{2}$
7	$\frac{3}{4}$ - $\frac{3}{4}$
8	$\frac{1}{2}$ - $\frac{1}{2}$
9	$\frac{3}{4}$ - $\frac{3}{4}$
10	$\frac{3}{4}$ - $\frac{1}{4}$
11	allows allows

yet there is only
100 degrees difference

1st Round Press 4 1/2
 1 side 3

OK
 OK

OK
 OK

* 1 side — 3

* 1 side 1
 1 side 3

OK
 OK

* 1 side 3

OK
 OK

* 1 side 3

* 1 side 3

* 1 side 3

OK
 OK

41%

Not Eaten

Irish Rose
 100%

2nd Round Press 4 1/2
 2 sides 3
 3

OK
 OK

OK
 OK

* 1 side 1 + 3

Com Edg. 1/2

OK
 OK

OK
 OK

OK
 OK

* 2 sides 3

OK
 OK

OK
 OK

OK
 OK

45%

Irish Rose

1090 E

2 Rounds 1522

Schedule —

Put in Contact needle
 just off pin —

When temp gets 180°

hold it between 180 & 200°

for 3 min then put 85 lbs

on for 12 min full

steam — Cool Cold

This is as good as any

1091

Press 42

* 1 side

Position
3OK
OK

* 2 sides

3

OK
OKOK
OKOK
OKOK
OKOK
OK

* 1 side -

3

OK
OK

* 1 side

3

* 2 sides

3

58%

Irish Rose

2nd Round

42

OK
OK1 bone spot $\frac{1}{2}$ 3

1 OK spot 3

1 OK small spec 4ms 3

1 poor print of end $\frac{1}{2}$ OK
OK

1 OK spec few - 3

1 OK spec few - 3

1 OK ring bone dull spot 3

OK
OK

1 bone spot 3

1 " 3

1 OK bone spot 2

25%

1091 E

2 Rounds Specially
Inspected Varnished
blanks —

Reg Schedule

Note -

in 30 or 40 Rounds

Top 6 of 12 Rounds on rack
gave 120' discards

Bottom 6 99 discards

(Bottom 6 is at top of Press -

1092 1st Round Press

Spot on label 3

ok space small 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

ok space 3

36%

1092 E

one

~~10~~ Rounds 1522

The holes of the blanks being
notched ~~reamed~~ - larger

at bushing center of blank
reamed below surface

Prog Schedule

1093

Press 41-

1 side open	3
" "	2
2 sides spot	3
1 open bare	3
1 ok 2 open	2
1 side 3 space	1
1 side bare spot	3
1 side space	3
1 side bare spot	2 @ 3
1 side space	2
1 side space	1
1 side from	3

OK
OK

16%

Jootic

Jootic

2nd Round
41 press

OK OK	3
1 side bare	3
1 side	3
OK OK	3
1 side	3
OK OK	3
2 sides bare	3
OK OK	3
OK OK	3
1 side	3
OK OK	3
2 sides	3

50%

Jootic

1093.F

2 Rounds 1522

Change the schedule this

Bring to Contact needle just off
pin, put on steam & wheel lamp
Reaches 175° Fahr put on
850 lbs & hold for 12 min
Cool cold,

I am told the Varnished
Blanks are very badly Varnished

Some very little var at Edge &
on little ways dotted thick

1093

Press 41-

✱	1 side open	3
✱	1 " "	2
✱	3 one spot	3
✱	1 open bare	3
✱	1 ok 2 open	2
✱	1 side 3 space	1
✱	1 side bare spot	3
✱	1 " space	3
✱	1 side bare spot	2 @ 3
✱	1 " space	3
✱	1 side open	2
✱	1 side open	1
✱	1 side form	3
OK		

16%

✱

Jostic

2nd Round
41 pins

OK		Pins
✱	both sides	3
✱	1 side	3
OK		
✱	1 side	3
OK		
✱	2 sides bare	3
OK		
OK		
✱	1 side	3
OK		
✱	2 sides	3

50%

Jostic

1093.F

2 Rounds 1522

Change the schedule this

Bring to Contact needle just off
pin, put on steam + wheel lamp
Reaches 175° Fahr put on
850 lbs + hold for 12 min
Cool cold,

I am told the Varnishes
Blanks are very badly Varnished

Some very little var at Edge +
in little ways dotted thick

1095 - Assume on label
as usual
Press 42 - 1095

OK
OK

OK
OK

OK OK bare spot touching
label

OK
OK

* 1 side OK
from 1 position 3 10

OK
OK

OK
OK

OK
OK

1 side pp at end of line 3
OK

OK
OK

- 2 sticks in it 1
OK about head of

OK
OK

Spec from head of mouse
about head of

13 bare spot 2
OK

1095

58%

3 down

Press 42 1095 2nd Round

OK
OK

1 bare spot 3

1 space small - 1

OK bare spot 1/2 3

OK space - space 1-1

OK
OK

1 bare spot 3

OK
OK

1 small 1/2 bare 3

OK
OK

1 long bare spot no point
OK dull on screen
which has no
label at after sun

1 bare spot 3

OK bare spot

33%

good found

1095 E

Ream out 2 Rounds of Variegated
blanks so bushing in mould will
go down into it that touch the
blank, to prevent cooking

Reg schedule

Notes

All Records fill perfectly

80% of discords are due to sticking to mould in large areas at end of record
There is only 2 Reasons for sticking -

1st The bushing + label + mat flattening blank flush at hole
Keeps mould from touching record some as much as .0115 - others less. This permits
Cooking - E.

2nd Cooking brings up shellac or if not shellac the g/4 is diminished some how -

5-17-16

Ordered Hoffman to
stop using Hammers
for loading 1522
blanks

5-17-16

1. Notes

Make round thin Var/soaking it
well in water, Dilute the Var by
Alcohol $1/5$ more by bulk soakwell

2 = Make some Var $12\% 6/4$

3 Try 4 rounds with fresh moulds

4 grafts bag knocking over mould

5 = Ventilated moulds

6 Tell Kucher about bad Varnishing

7 Neutralize KOK on moulds by $1/10$ to $1/20$ HCP

8 - Varnish 24 starting at hole -
going outwards

9 Hoffman try fine ground powder in
your scigular ~~ly~~ ~~re~~ blank

10 Move to use $2\frac{1}{2}$ or 3 pair discs
Moulds press at 850 at at at
ditto 850 lbs Cold thin steam for 12 min

1096 E

Haffman

Special Var Thinner

Viscos of Reg 1019 is

1 min 30 sec

This var thinned by alcohol
& viscosity made

1 min —

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 14
Notebook, N-16-05-17

This notebook was used by Edison during May 1916 for notes on experiments to improve the surface quality of Edison disc records. The entries pertain primarily to experiments 1097E through 1137E; there are also lists of other experiments and tasks to be performed. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted. Also included are notes on inspections of discards, along with comments on edging experiments. One notation indicates that the results of experiment 1134 were reexamined in November 1916. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or Archie D. Hoffman. Inserted into the book are two loose items, including a note by Edison in regard to Experiment 1134. The front and back covers are labeled "14." The pages are unnumbered. Approximately 140 pages have been used.

12—100

11 91

10 83

9 75

8 66

7 58

6 50

5 41

4 33

3 25

2 16

1—8

67150

Acme Co.,

MFG. STATIONERS,
96 JOHN ST.

AND
19 PLATT ST.
NEW YORK.

Started

5—17—16

Req Dup
load 2

Pres 44

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

spot ————— 2
space 3

space ————— 1
space 3

OK
OK

OK
OK

spot ————— 2
space 3
space " 2

66%

Req Dup

Pres 42 - load 3 -

OK spot on label print frame 3

OK dull spot next label 3

OK
OK

space / new ————— 3

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

space small 3

OK big frame apart 3

58%

Rag Dup 1522 1019 Var
Press 42 Load 3

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK Spot - 3

OK Space 3 places 2

OK
OK

OK Same spot hat up 3

OK spot 3

OK spot 2

OK 2 cones pots 2-3

50%

Rag 5-17-16
Press 41

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK space op 2@3
OK space 3

OK space 3

OK space 2

OK space hat up 3

OK space 3

50%

NOTE

5-17-16 - NOTE

NOTE

Here is a change in position 3 + Pull out question.

Reducing lampstock, makes less specs + these are not pulled, but round, yellow in color showing air below, when diamond runs over breaks item - 75% OK. The Varnish runs out over moulds. Miller noticed before when this occurred % was good.

This is the new line to work on - Label blank or 1 coat 5 cc on machine, and manipulation of var + baking SEE 1080-C Vol Book 13 -

1097 E

Luhr has made Two Moulds for Hoffman having brass discs representing label, .002 thick soldered on with Bismuth solder Hoffman to use them all the time and send to me.

These tend to come off

5-17-16 Not necessary now -

Opened moulds so as not
to pull off direct but little →
twist given before raising

The twist dont seem to answer

New Lot Moulds. Hula, + Rosary

space " large ones	3/3	space - OK	2
OK OK		OK OK	
small firm OK	2	space / op OK	3
OK OK		space OK	3
small open OK	1	space space	3 3
turns space / op	2	BR OK	
space space	3	OK OK	
Bone spot / op Bone	3	space / op space	3 2
space / op space	2	space small OK	2 + 3
OK OK		space "	3
space space; space / op big	2 3	space "	2
space small OK	2		

25%

Hula

Rosary

1098- 1st Round

Press 41 dead 9

Com OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

3/4 full

Space (use = Vm)

Special dead end

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

100%

2nd Round Press 42 Load 10

Com Edge V 1/2

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

2 line space in label

fine bridge wall space

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

fine "

100% print

1098 E

24 1522 blank

Only 1 Coat of Varnish - 5cc

Use the 1 min Viscosity Var 1519

put on coat - immediately another

coat. Then bake 2 hours at 130°

1099.E

Press 42

Round 10

OK
OK

OK
OK

OK
OK

OK
OK

Very fine 3

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Very fine 10
Large 2.5 mm

100%

2nd Round

Press 42

OK
OK

OK
OK

OK
OK

1 1/2 x 1 1/2 Bridge well
no sound

OK
OK

OK
OK

OK
OK

OK
OK

Bridge well clear

OK
OK

Bridge well clear
no sound

OK
OK

OK
OK

Bridge well clear
no sound

OK
OK

Looks good #2 OK

OK
OK

100%

1099.E

24 1522 Blanks One coat

only - Bake 2 hours, 1019 Var
Btt Van Machine 5 cc -

Print Regular -

NG -

1100 E ←

↓
All puffed up, stick to
Moulds - took 2 out
but put others back in
press to run Reg to
get them off

Shows there is lot of
air under pressure
under Records

After respunding they came off
moulds freely

- 1100 E

2 Rounds req 1522 blanks

After 850 lbs have been on

for 12 minutes reduce

pressure to Contact needle

just off the pin - hold it there

Cool Cold -

1101 - Round 1
Press 41 Load 9

OK
OK

OK
OK

OK
OK

poor print next to label
but OK

space
space

3

space
OK

1

space
OK

3

OK
OK

OK
space

3

OK
OK

OK
OK

OK
OK

OK
OK

OK
space

1 @ 2

58%

2nd Round
Press 41

space next label OK 3
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

25%

1101

2 Rounds

Change schedule
to 1000 lbs instead
of 850. in Reg Schedule

1000 No improvement
worse apparently -
too much Varnish
makes gas -

1102

OK
OK

Bridge wall cross

OK

OK
OK



Therapy will answer



Sp

Space of venous plexus out

味

... - Constant speed

4

Background ^{is light}
Crushed Edge Discard

OK

OK
Cows

OK

٥٦

OK

Yves et Zola VY

1

5

13 Dec.

↑ Dyeing with upland

83%

1102 E

One round label blank
Varnished 1 Coat
in the Machine 5cc
bake 2 hours

Beam holes

Print Reg. Schedule

Do not need the sunken
label - Don't do any
good - 5-18-16 -

Printed two of them =

The first one Cracked the Blank
found pin was too tight, forcing
down by men probably cracked blank
Made another one this was
reamed .008 larger @ the
hole.

This printed fully.

Surface very good considering
that there is no varz better
than our regulars when
we started -

No Run outs could make a
Crown record if 1000 lbs pressure
used -

This experiment shows we only
need one coat of Varnish
baked 3 or 4 hours to make
it a Success -

Surface is nearly as good as
Varnish except Low Center -
where Var helps -

1103 E

In one of the Reg rounds
use a discard mould
put in a 1522 blank
no Varnish on -

See hole is reamed -

Print the round regular
+ note on slip if its in
the round

1104

Press 41 Load 9

OK
OK Veneer $\frac{1}{2}$

OK
OK Veneer $\frac{1}{2}$

OK
OK Spot on Label

OK
OK Veneer $\frac{1}{2}$

OK
OK

OK
OK

OK
OK Veneer discard print ok

OK
OK

OK
OK Discard Edges print ok

OK
OK

OK
OK

OK
OK Edge discard ok print
- Splice many

91% print

75% to 5th

1104 2nd Round Load 10

Press 42

OK
OK

OK
OK Discard Edge ok print

OK
OK Discard Veneer ok print

OK
OK

OK
OK Discard Veneer ok print

OK
OK

OK
OK Splice down sound 3

OK
OK

OK
OK Splice down sound 3

OK
OK

OK
OK Edge V $\frac{1}{2}$

OK
OK

OK
OK

OK
OK Veneer V $\frac{1}{2}$

OK
OK

OK
OK

OK
OK Splice bring back down sound

OK
OK

OK
OK Bridge wall - good 3 - OK

100% pass

1104 E

Make 2 Rounds Duplicating
C Varnish of 1080 E

but put on only one coat in
machine 5 cc -

Bake 2 hours - 130°

Print Rag

1080

Duplicate 2 Round with this
Varnish on Label blank -

Note that 100g 1 min Vis
is better than this showing
thinner Var goes into blank
deeper + anchors Veneer
better

1105

Hoffman

Cancelled

Make some Varnish use
no lampblack $1\frac{1}{2}$ Viscosity
8% $\frac{6}{4}$ Res Sandrac
But leave out Pova
altogether,

1106E

Use the Varnish of 1105
One Coat 5 cc done on
Machine, Bake 3 hours
at 140° Fahr

Print Reg Schedule

Req
Press 41 Load 9

OK
OK

OK
OK

Spec op 3

OK
OK

OK
OK

Spec from 1 3

OK
OK

Spec op 3

OK
OK

OK Spec 3

OK
OK

OK
OK

66%

Req
Press 41 Load 9

OK Spec 3

OK Base spot % 2

OK Base spot 2

OK
OK

OK Spec 2

OK Spec op 3

OK Spec op 2

OK Spec near lat 3

OK Spec pull out 3

OK Spec 3

OK Spec 2 @ 1

OK
OK

16%

* means no record of
position etc

Rag
Pres 42

*

*

OK
OK

*

*

*

OK
OK

*

*

*

*

*

16%

Too much Van & not thorough
baking makes gas - no pull
outs -

3 Crates is a mistake,

Single Coat long baked is
what's wanted

3.5 or 5.00 2 @ 3% lampblack

or none,

1107 This is I Van of 1080 book 13
Press 41 - load 9

OK Yellow green not pull out, 2

Diagonal $\frac{1}{2} \times \frac{1}{2}$ red green
both sides - no pull out

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

8%

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Edge

41/0

1108- 1st
Press 41- Load 9

OK
OK

OK
OK

Space veneer - OK

Discard Veneer
Space-OK

OK
OK

Space too much
OK

OK
OK

Space
Space big area

Space
Space

Low veneer

OK
OK

Space fine
OK

50%

58-

2nd
Load 9
Press 41

Discard Veneer

OK
OK

Space Space probably OK on back

Space " "

Space " "

Low Veneer to
OK

Bad Space
OK

Discard Veneer
OK

Low Veneer
OK

OK
OK

OK
OK

Print OK Discard, V edge to back

1108E

2 Rounds 1522 - reamed
hole slightly larger after baking
Use Varnish "D" one coat
35.5¢ bake 4 hours

Print Reg

1108 } are Duplicates by
1109 } Mistake -

No Lamp black in D

5-18-1916-

Technique now.

Blanks 1522 B. no hammers

Varnished one coat 5 cc
of 1 min Viscosity 1019 Var

Baked 2 hours

Beamed at hole for bushing
below.

Printed regular schedule.

Contact needle off pin when
200° reached put on 850 lbs
12 mins Cool cold.

Holes reamed 2008 larger to
stop rocking of blanks

III E

Press 42 Load 10

OK
OK

OK
OK

OK
OK

Discard Fence

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

9 1/2 100% prints.

No Van record is
pretty Rough

III E

Hoffman Make 4 Rounds
1522 in moulds that have
the rough faced plates
used with slot transfers
Blank-

Varnish 1 coat ^{5cc} on Machine
with 1 minute Viscosity
Varnish Bake 2 hours

Print ~~with the~~ Reg
be sure one round has
the Discard moulds
Do use blank not varnished

Notes -

Notice Scraping off wheel all chewed
up on edges + rounded - This should
be inspected + trued up often

Fixing bushing in mould will
cut the nose in center flues perhaps
new bush necessary =

Much oil may come from bearing
of scraping off wheel creeping -

1112

Press #1 Load 9-

OK
OK

See spot and hear
back of fill.

OK
OK

OK
OK

OK
OK

Discard Edge
OK

OK
OK

OK
OK

Discard-Edge
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

can hear this ①
but OK

83% 100% passed

1112 E

Hoffman

Find 12 blanks with

Most specs of metal & largest.
pick them out, send over
& I will Varnish & Run
them Reg

It is all right to pick out
off face the steel chips if not
scraps too deep. Careful work
will save them all —

The only effect is that it
spot is not a full print

5-18-16

1522 B 1 coat 2 hours bake
1 min Viscosity - 1019
Van up stairs

This shows No hammer
blanks, 1522 B are OK

also 1 min 1019 Van OK

The bridge wall areas are
due to the 6" Center diameter
of all blanks is lower
than the Edge circle
as shown by the Printing of the
Non varnished blank
+ that bridge wall areas are
Really only a 3/4 fill.

WE should bring Center of Blanks
up a little more

Bridge wall only makes surface a little rougher as it
not consolidated into a full Print -

5-18-16 1522 B

New Series -

Reg # 1 Round

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Bridge Wall area 3
only roughness 2nd

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Bridge wall area 3

Press 41

1522 B

2nd Round

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

low print spot

faint low print spot

low print spot
+ hole started on label.

Low print around Second
and Label

low print all around set # 3

91%

100%
1st Record of 5-18-16
Technique -

Reqs. give clean edges -
Moulds are also clean -

[illegible]

7th Load 9	8th - Load 10	Reg factory hand 9th Load 9	Reg factory 10th Load 9
41	42	41	41
low spot 3	Winner pulled out OK Edge none		
OK	OK Low spot 3	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK Low spot 3	OK
OK	OK	OK	OK
OK	OK	OK Low spot 1	Com Edge
OK	OK Low spot 3	OK	Vencc DISCARD
OK Low spot 3	OK Low spot 3	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK Low spot 3	OK	OK Low spot 2	Edge DISCARD
OK	OK	OK	OK
OK	OK		
OK			
100%	91%	100%	83% 100% (100%)
Edge none	Edge none	Edge none	Edge 3-

11th	12th Factory	13th Factory	14th
42 Load 10 Mould <u>Pullouts 2</u>	41-Load 9 No Pads Mould	42-10-load	
OK OK	OK OK	Vener <input type="checkbox"/> DISCARD OK	
OK OK	OK OK Low atten 3	<input checked="" type="checkbox"/> Edge <input type="checkbox"/> DISCARD	
OK OK	OK OK	OK OK	
OK OK	OK OK	Cum <input type="checkbox"/> Vener to OK	
OK OK	OK OK	OK OK Low test 2	
OK OK Low test 3	OK OK	OK OK Low Spt 3	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK Spoth 3	
OK OK	Cum OK Edge	OK OK Low Spt 3	
OK OK	OK OK	OK OK	
Cum Vener OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK Low test 3 Suffice		
100%	100%	83% 100% Pt	
No Edges	1. Edge		

Y 5-19-16
Inspection of 1522 B blanks

Blanks within 012 Caliber OK

" " 020 " Seconds

Blanks beyond 020 to be held for
further orders

Special defects causing
discard to be held for further
notice

Steel in face of Blanks if small
is to be passed if large held
for special operation -

Give me a dozen with many
spots & I will mark those
which many pass -

250/1000 Maxima for thickness

Crush Edge Expt Moore Expt.

Printed without pins —
Inspected for Crushed Edges only

OK
OK

out of line

from discards

OK
OK

"

OK
OK

" Bad

!

$\frac{1}{2}$ edge not pulled out - Venice drawn a little
showing slight crush

OK
OK

out of line Bad

OK
OK

slight

almost in line

OK
OK

out line Bad.

Nothing in this Theory

Theory was pins at angle
& faces of records shifted
Disproves Theory

1113 E

12 blanks 1522 B with rubber 6" dia.
 $\frac{1}{2}$ " thick added to Reg Pressure Rubber
to make middle of blank thicker, it now
being low -

Print 1: in each Round - 6 Rounds
load 9 + 10, No Varnish on
blank -

This was done +
They were very much
more even, it also
appeared to stop crushed
22 gas

14th fraction

1522 B

42-10 load

Would no PO

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

15th fraction

42-10 load

Would no PO

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

16th fraction

42 load 10

no pull out time

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

17th fraction

41-load 2

no mould PO

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

100%

no Edge

100%

no End Edge

100%

no End Edge

100%

no End Edge

Average to clock 88% to this point

18 Testing approximate 42 - load 10 1 hole PO	19 41 - load 9 None struck	20 42 - load 10 - None struck.	21 42 - 10 load none struck
<div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>L Spot 2</div> <div>OK</div> <div>L Spot 2</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div>	<div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div>	<div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div>	<div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>L Spot 3</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div> <div>OK</div>
100%	100%	100%	100%

No Var blank in 24^{Round} - 1113E lot
Evenly printed, even shine all
over - one face shows spots,
some muck came out of blank
+ made 15 knots -

[illegible]

Many feathers hole too small
have them thrown out &
fixed

[illegible]

Moore's Expts to find out cause of
raised spots & missing edges on
blanks when heated 200° Fals in
of Press

1 = finger marks dont produce them

2 = Salt (dry) dont produce

3 Machine Oil "

4 Sesame oil - "

5 Alcohol "

6 Water this produces them

7 Spills marks - this produces them

8 Solid Cops 6/4 this produces them good

9 Para^{solid} this produces them -

10 K^{solid} Dont produce

11 KCy " "

12 Phenol " "

Water + 6/4

33 Rounds 93.55 OK

30

1523-dot 4
41 - low of
no pull out

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

31

dot 2 15223
42 - low 10
No pull out

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

32

dot 6
41 - 9 low
No sticks to them

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

33-

dot 7
42 - 10 low
2 pull out

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

100%

100%

100%

100%

1114 Press 42 - Load 10

OK
OK

OK
OK

OK
OK all around faint low due probably to label
or Van Line

OK
OK

OK
OK } low long spot opp - No 2 position

OK
OK

OK
OK

OK
OK low all around probably due to label
or Van Line Low

OK
OK

OK
OK

OK
OK

OK
OK

Think bad Moulds may
have something to
do with last 3 Rounds

100% No Veneer or Bad Edges

for other 3 Rounds see 3 sheets
Ahead

1114E

Koffman - Make 48
flanks like 1113, with the
Extra 6" X $\frac{1}{32}$ Rubbers on
big Rubbers

~~1~~ 4 Rounds 1 coat
1 min Visc only
2 hour bake

Print Reg 1522 B schedule

This don't stop low spots
at 3rd position
other 3 Rounds 3 sheets ahead
shows bad Veneer + Edge
Discolor + low spots

Pressing blank 15223 between record
Monoph. 895 lbs NO heat,
only makes Tit impression circle on
Label faint, + only traces of
second vibrations I

No. 1-

43 Rounds

91%

100%

 $100 \cdot f$

100%

1114 E
2nd Round
41 - Load 15

Edge + Veneer DISC

OK
Com Veneer
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK Low, ductor finish 3
Veneer DISCARD
OK

Com Veneer
OK

OK
OK

OK Low spot 3

Edge + Veneer DISC

75%

3rd Round
42 - 8 Load

OK
OK

OK
OK

OK Edge V

OK
OK

OK Veneer -

OK Veneer Low spot

OK
OK

OK
OK

Com Veneer Spot 3
Veneer DISCARD

OK
OK

OK
OK

OK Low spot 3

91%

4th Round
41 - 12 Load

OK Low 3

OK Veneer + Edge

OK Veneer + Edge Low 3

OK
OK

OK Veneer

OK Veneer

OK Veneer Discard

OK Low all round 3

OK Low all round 3

OK Veneer

OK Veneer DISCARD

OK
OK

OK
OK

83%

1115 E

12 1522 B printed without
Varnishing 1 in each Reg
Round - Made with
Extra 6" x $\frac{1}{2}$ rubber in
middle of big Rubber
Blanks 10 perfectly Even
2 slightly uneven

42- Load 9

1 (OK) Salin-

2 (OK) Jump over

3 (OK) Bad Label

4 Bad fill

5 Bad fill

6 Bad fill

7 "

8 "

9 "

10 "

11 "

12

3 position

By manipulating
technique on Varnish

Getting Middle blank
higher at 3 positions

at 1000 lbs in Print

presses final

think we can

make Reprints

75% OK

Amfon good

1115E

Reprint-

Varnish 1 Coat 1 min

Viscosity 1019 Var-

1 round of Req 1522B

Records - Dry 2 hours

Print req

1116E Edging

- 1 1/4" dont clean it = 3/16 will
- 2 This has only 1/8" margin left
- 3 Subst clean up = blank cleaned but Veneer PO
- 4 Blank cleaned ok but Veneer pulled 3/16 left
- 5 (OK) 1/4
- 6 (OK) 1/4
- 7 clean up with 5/32 Margin
- 8 1/16 margin left.
- 9 3/16 margin left ~~Subst~~
- 10 (OK)
- 11 5/32 margin left
- 12 (OK)

1 1/4" 3/16
33% 58%

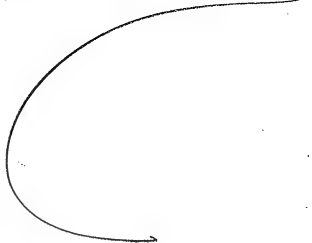
1116E

12 Prints which were ~~st~~
 supposed to be discarded
 for bad edge but which
 were not actually chipped
 out except a part, but from
 the appearance of the
 Veneer might extend further
 than apparent & be a
 discard
 The standard is 1/4" but I
 find it 1/32 more than this
 on some of Edged records
 returned -

Note

Requires 370 lbs Chalk

per 1000 1522B Blanks

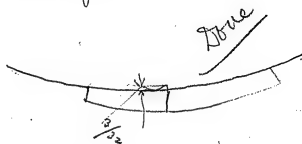


Inspection for discard blanks
Edges.

¹ Nicks within $\frac{3}{32}$ of Edge are

² OK -

More than $\frac{3}{16}$ Discard
have gauge made



24 Blanks

13 Discards

11 OK within the $\frac{3}{16}$ limit

Caliper of Old Transfer Records from Baldwin

10 of them — 1297 Blank

		Dif-	
227	217	10	
226	225	1	
227	232	5	
232	230	2	
238	228	10	
225	225	0	
226	218	8	
218	218	0	
240	222	18	
230	233	3	
2289	2248		

Highest 240

Average 226

Caliper of 12 New 1522 B Records

216	213	3
211	205	6
216	216	0
224	216	8
205	211	6
207	217	10
223	223	0
212	212	0
208	213	5
220	217	3
235	222	13
217	213	4
2294	2278	

Original blanks
not above 250.
were used.

Some days mean
says gets lot over
250 other days
under 250.

average 215 1/2

1522 B

Caliper for worst.

They use a Micrometer gauge when
over 235 — 1522 B are nearly all
over 235 — hence solid gauge not
used.

Man says Chipped Edges due
to striking edge of one blank on
the other by sliding on the pipe.

I think some are chipped by
the Snap gauge — & I believe
by the micrometer — also rubbing on edge of pipe.

		Thick
15	26	262
13	16	250
16	11 — note	250
18	20	251
20	16	253
17	12 — note	253
20	17	255
25	15	
15	17	
13	18	
17	25	
7	25	
30	15	

note: values imprecise

above 250
ballance
below 250

New 1522 B Blank Inspection

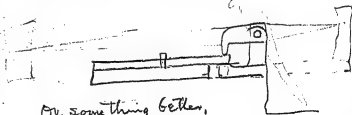
Anything under 260/1000 ^{no calliper for thickness} OK

Chipped Edges extending in not more than $\frac{3}{32}$ OK

Callipering for difference of thickness not necessary
Abandon it,

Inspect for steel and holes,
dirt, etc

Get a special gauge for
Quick calliper for thickness



Or something better,

1117E

8 Rounds of discard
blanks, discarded for
too great difference in
Caliper up to 30/1000.

1 Coat 1 min ^{vis} 2 hour bake -
1019 -

Print decg 1522B schedule

See next page for
results →

8 = Dont work good - Dimwiddle Eppley

11 = Is Eppley

14 = Dont stop low spots, Venus or Edge

8 = See how new larger magnet works
if it dont do it put another in
~~the~~ & divide the drop -

9 = Inspector picking steel out &
scrapping -

10 = Keep floors on the drops of
liquid that swells up

11 = Dimwiddle Ept on roller explain
pulling on Vennish.

12 = Emergency storage sealed
Cans motels & supply
Grafts - in Vennish

13 = Specially sifted V Ery much
fines powder 1522 B for print
to Master & water proof

14 Watch new 6" $\frac{1}{2}$ extra pad
on Rubber plunger to see if
it stops low spot print
& broken Edges by evening
up pressure

15 See if Can stick paper label
on Edge of record & have it
water proof same time

16 Edge & number 4 Rounds
new record - I to inspect
them - 10 checked & all

17 Loads 9 + 10, to be kept
running - Would Inspector
to watch & report any
taken off & why & I to listen
to print of discarded
would I discarded

18 Smoulding Experiment of 2
8" hardened disks for grinding
lampblack - Bagardus
type & closed to prevent
explosion

19 New loader for powder in
moulds & having them

20 = locate Every ~~located~~ 3' low
Every working day OK

24 = Using paper

Note

20 = See Every ~~located~~ supply of
Chalk of Extra Hairage Seven

21 - Have we an automatic
device used by Cement Co's
for sampling 180 needles?

22 = Do we keep wear & spare
parts for Fuller McClellan?
It has Mallory answers
about his giving us 2 needles

23 Find storage for Hammer
loaders ground up & use
space for increased capacity

24 Devices for proper handling
of blanks, so not hurt edges
of scratch surface

25 = Lubrication the high Tins
+ bake - + let me have
4 Records

31 = Fred still making some OK

26 = Soak $\frac{1}{2}$ dog records
3 hours in water see if
any holes in music -

27 Make wax tests on bands
till 500 times - Then
1 gnl is all we cover need
 $\frac{1}{4}$ " sufficient.

28 - Christensen make cold
tests - Then over heat
180 then blow in Bone
use $\frac{1}{2}$ dog -

29 Put on roof to Edged +
waterproofed records
for weather test
also $\frac{1}{2}$ dog in hat
place

30.
31 = dubby gauge for chip and
in edge of blocks

32-ordered now being done

33 OK done must be not less than
7- 8 1/4 best, note

34 OK done - note

35 OK Reseal

36 OK works OK

32- take off inspection limit
on variations of Calceper powder
blank or thickness

33- test 4 Rounds & min Coal
~~Ordered~~ " 4 "

34 Reg schedule 850° for 10 min
7 Coal - 4 Rounds

ditto 4 Rounds 850° - 8 min

7 Coal ditto 4 Rounds 850° 6 "

7 Coal ditto 4 " 850° 15 "

7 Coal ditto 4 " 850° 15 "

35- 4 Rounds Rubber pad having
6" 1/16 thickness

36 get Mandrel & assemble
records for Edging
& Inspect for edging

37 = Modified Emu - OK -

Male -

40 - 5 7/8" and Records Disc

37 = ~~Strip Emu~~ from ~~Cont. Fedem~~
for 6/44 ~~formal deal~~ for
~~also~~ Key & Acidhal

38 Make some 1 min Vis Rec
for ~~4~~ Records no para
or Sandrine - make Em
& wear tals -

39 - Ditto ~~4~~ Records. Para
but no Sandrine

40 - ~~Adaptain~~ ~~Adaptain~~
~~Stops~~ ~~Stops~~ ~~Stops~~ ~~Stops~~

41 For Cylinder records
Moulded Cylinder 1522 B
then Varnish & percent
Hot air.

44 & banked

note

note

44 Now being made

42 = Take up subject sheathing
Haffmans dept steel sided
floor head or members of
truss, - Sprinkler system
steel windows Belflower
other places

43 - Make more dropping table

44 = new $6\frac{1}{2} \times \frac{1}{32}$ rubber with
Extra 1/4 in cut 3 p. over
4 rounds

45 = Wash face second with
Alcohol soda of first

46 = Add one pair tracked
moulds to load 9 + 10

47 get up complete list of
forms & forms (chemicals
for daily reports

49 abandoned

53 it was Collyman, has it done
now -

48 = Put on the ~~Thermometer~~

49 = Haffman 4 pounds
with ~~6" x 1/2" x 1/2" rubber on~~
~~rubber disc~~ but with
hole in center exact size of
label -

50 = See how many rotating
Vermish pots we get in use
& how many wanted -

51 = Time the output of the
Vermishers -

52 see if Record washed after
numbering & Vermishing
otherwise might get water
in & swell edge of Record

53 = Find out who used Fuller
Mill from Cement Co &
who sent it back -

1118 E

One round 1522 B.

Reg Schedule Except

Cool Six minutes

Press 42 - down 12

OK OK special back side layers

OK OK 2 snaps with end pull out.

Discard Veneer

Com OK Veneer + Edge

Discard Veneer

Com Veneer
OK

Discard Veneer

Discard Veneer

OK OK

Veneer

Edge Discard

Veneer Discard

All discards run
on Tap side -

41%

1119 E

One Round 1522 B-

Reg/schedule except
Coral 5 minutes

Venes
Biscard

Venes
Biscard

OK
OK

Edge
Biscard

OK
OK

Venes
Biscard

Com Venes
OK T Edge

Low Venes
OK

Low Venes
OK

Venes Edge doubtful
OK

OK
OK

OK
OK

58%

1120 E

One round 1522 B

Reg Schedule Except
Coal 4 minutes

Press 42 Load 7

Veneer Discard all round

OK

Comm veneer to

OK

Comm Veneer & also Label

OK

Discard Veneer

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

OK
Veneer Discard
Veneer Discard
Pull out ② in music
Veneer Discard
OK
OK
Comm Veneer &
Veneer Discard
Veneer "

33%

2nd Round 1121 E

42 pieces
Load 6

OK low at Bottom 1 ok

Com Edge V

OK

Vener DISCARD

Com Vener 1

OK

Com Vener 1

OK

chip out of mouth - Carcinomas - ~~insect~~
ok Discard
chip out of Edge blank in handling show Kender DISCARD
ok Discard

Vener 1

ok Discard

OK

Com Edge

75%

1121 E NOTE

Low spots due to
Varnishing -

No low spots at 3

also note 1124 - low spot at 1 -
2 Rounds 1522 B,

1 Coat all over after its air
dried put Extra Coat at
Position # 3. - then Bake 2 hours

Print Recy

Press 4 - dead 3

Vener DISCARD

OK

OK

Vener DISCARD

OK

OK

Vener DISCARD

OK

OK

OK

OK

Com Vener

OK

OK

Com Vener

OK

No low spots

75%

Time 5-22-16-

Start

Bring Mould from Assembly R	1.44
Press loaded	1.45
Bring in Coal	1.46
Bring to 200° Fahr	1.48
On heat 12 min	2.00
Start to Cool	2.00
Cold-	2.07
Drop press Eject on truck	2.08
Return Mould to Assembly Room	2.09

Total time one cycle 25 minutes

from press to Assembly Room
back to Press averages

11 minutes -

2nd Lat Discards

- 1 - Scratched record
- 2 - Dirt on Varnished blank -
- 3 - White dirt 1 side - fibre on Van other side
- 4 - Scratched Varnish
- 5 - Pull out,

only 5 of 1 Coat,

Inspection of Discards 1522 B 1 coat,

- 1 = Inspector Carelessly let down
Reple's point & diamond spoil record
- 2 = pull out at feed line
- 3 = " " "
- 4 = " " "
- 5 = piece wood. Either blank or mould
think was on mould =
- 6 pull out.
- 7 Dirt
- 8 Pull out.
- 9 one snap, should press. { its in mould
both same spot
- 10 " "
- 11 long piece wood fibre & diamond of rest -
probably on the ~~wood~~ Van after or just
before take
- 12 ok too many snaps -
- 13 = This is a 1522 But 3 Coats
Varnish - got mixed

Inspection of Discards called
1522B - SCRAP

8th Lot of 12

1	Crushed Edge	NG
2	"	NG
3	"	NG
4	Penner	NG
5	Crushed Edge	NG
6	Penner	NG
7	"	NG
8	"	NG
9	Edges Crushed	NG
10	Penner Edge	NG
11	Penner	NG
12	"	NG

All Properly sized for
Regrinding - Except Penner
which may in time be
used for regrinding &
Reprint.

1122 E

One round 1522 B.

Reg schedule except
Cool 8 minutes.

42 focus - 9 hand on

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

6 min 41%

5 " 5%

4 " 33

8 " 100%

710 Reg-

Wants 8 min cool
to free wire

100%

1123E

~~Hoffman to get Rubber
Co to make one rubber
with 6" $\frac{1}{32}$ raise ~~with~~
~~it~~ with hole in~~

Hoffman to make ~~one~~
four rounds using
6" $\frac{1}{32}$ Extra Rubber on
big rubber but with
a hole cut out just
size of label -

NOTE

From this Experiment all nicked
blanks Not more than $\frac{3}{32}$
in ^{loudest music} Can be Printed

1126 E

Select 1 Round of blanks
Chipped at Edges which
do not go in loudwords
music more than ~~$\frac{3}{32}$~~
 $\frac{3}{32}$ Select by Gauge

42-load 3 OK
Vices DISCARD - Y ok

OK - Y " V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

OK - V ok

24-load Bad DISCARD
OK

Vices packed in feed bin Edg
OK same

66%

1127 =

Edge Discard also Veneer Ga

Com
OK

Edge V + veneer

Com
OK

Veneer $\frac{1}{4}$

Com
OK

Veneer $\frac{1}{16}$

OK
OK

OK
OK

low 3

Com
OK

Veneer

OK
OK

OK
OK

Veneer $\frac{1}{16}$

Com
OK

OK
OK

Veneer + V Edge

Com
OK

Com
OK

Veneer $\frac{1}{16}$ + Edge Crushed

1127 E

One round 1522 B.

$\frac{1}{4}$ inch ~~of~~ of Edge has
Extra Varnish after 1st Coat
dried - Varnish Comes over
Edge just a little,

The Extra Varnish

Makes it Coarse

1128

1st Round

Press 41 Load 3

Veneer DISCARD
ok Low all roundVeneer DISCARD
ok Low all roundVeneer DISCARD
ok Low all roundEdge - DISCARD
ok Low all roundVeneer DISCARD
ok Low all roundVeneer DISCARD
ok Low all roundEdge - DISCARD
ok Low all roundLow spot - 3
ok Low all round

Low ok Low all round

Low ok Low all round

Low ok Low all round

Veneer - DISCARD
ok Low spot of 3

33%

2nd Round -

Veneer + Low at DISCARD
VeneerFull back DISCARD
VeneerEdge bad DISCARD Low all
Veneer badVeneer Low at 1 all round DISCARD
okCorn Veneer
okLow Veneer
okVeneer DISCARD Low all round
EdgeVeneer + Edge Low at 1 DISCARD
okDISCARD
Veneer Low all round
okEdge + Veneer DISCARD
okEdge + Veneer DISCARD
okEdge bad DISCARD
ok Low at 1 all round

16%

1128 E

Two rounds 1522 B.

The blanks varnished starting
at the inside of label + varnish
outward -

Print Reg

Thin Varnish at

Edge Bad -

Also apparently cause of
Low spots at 3 lbs caused
by - Thin Varnish -


NOTE



1129E

2 Rounds Varnished with
Varnish 1130E

See next page for
Record



1130E

42-14 low

2nd Run
Press 40 lowOK
OKBlank Crack
Veneer DISCARD
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKLow Veneer
OKLow Veneer
OKLow Veneer
OKBlank Crack
Veneer DISCARD
OKOK
OKLow Veneer
OKEdge DISCARD
OKLow Veneer Edge
OK

66%

66%

Don't help
Veneer

1130-E

Hoffman make a
quart of 1019 Varnish
with viscosity of
3/4 of a minute instead
of 1 minute -

Note Surfaces not so
good as Reg 1 min
Var show tendency to
on start & it does not
cure the veneer problem
at the edge -

1131 E
42-15 load
12 Round

Com
OK Veneer $\frac{1}{2}$

Build out fess line -

OK Veneer + Edge DISCARD

OK

OK

Com Veneer

OK

Com - Veneer

OK

Veneer - Discard

OK

Veneer DISCARD

OK

Veneer DISCARD

OK

Veneer DISCARD

OK

Edge - DISCARD

OK

Veneer DISCARD

OK

33%

2nd Round

42-load 14 -

Veneer way in Mureto DISCARD

OK

Veneer pulls in Mureto sign DISCARD

OK

Veneer way into Mureto DISCARD

OK

also bad Edge

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

41%

1131 E

Hoffman

Make quart

1019 with viscosity

$\frac{1}{2}$ minute

Very Bad too much

Alcohol -

1132 E

2 Rounds Varnished with

1131 E Var

1133E

Print 8 Rounds of blanks
having Edges Rounded by
Moore

Print in different presses &
loads -

Print Reg

[illegible]

1134 (Round) 1st	2nd Round	3rd Round	4th Round
42-Load 12	41-Load 2	42-Load 9	41-Load 5
OK OK	Com Edge OK	OK OK	Com Edge V. OK
Com reverse PO OK	Vinner Edge OK	OK OK	Com Edge V vv OK
OK OK	Vinner V DIS OK	Com Vinner PO OK	OK OK
Com Edge Small OK	OK Low 3 OK	Com Edge. OK	OK Vinner Long OK OK
Edge Band OK DIS	OK Low 3 OK	OK OK	OK OK
Com Vinner Chk OK	OK Low 2 OK	Com Vinner PO OK	Edge DISCARD OK
Low Edge OK	OK OK	Com Vinner Chk OK	OK OK
Com Vinner Chk OK	OK OK	OK OK	OK OK
OK OK	Com Edge V OK	OK Low 3 OK	OK Vinner Chk Long OK
OK OK	OK OK	OK Low 3 OK	OK Low 3 OK
OK OK	OK OK	OK OK	OK OK
Edge DISCARD OK	OK OK	OK OK	OK OK

83%

83%

100%

91%

1134E

4 Rounds on blanks 1522X
with new load of chalk
with 8% lime

Print Recg

Pulp	50.0 %
Chalk	37.5
	12.5
	<hr/> 100.0

This Chalk OK -
Reexam Nov 27/16

Mostly fine V fine + VV fine surfaces
all satisfactory good stands no RO -

Monday Factory % 1522B
83.6%

out of 1739 ok's -
The Edgers spent 253.
by the handling -
all done on single
Edgers -

10 Blanks 1522B

Varmished on Otto Machine

OK
oil

bag of oil, fair and

Can handle - close spirit bond

OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

91%

Another round by Fred Ott. Fells
only on each end - $\frac{1}{4}$ thick -
12 = . Moore rounded Edge blanks.

OK OK no overtones etc

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

100%

Hand Experiment
Records
Eding 1522 B₂ on Mandrel
Multiple -
Inspect for Revaling
& injury

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

This is the way
Σ

100%

2nd Round

- 1 - Venus - will reprint
- 2 " "
- 3 Venus will Edge
- 4 Venus - will Edge
- 5 Venus will reprint
- 6 " " Think OK by Edging
- 7 " Try Edging - it will reprint
- 8 Venus will reprint,
- 9 " " "
- 10 " + Edge will reprint + Edge
- 11 will Edge OK -

5-23-16

Discarded by Eye Inspector CRACKED EDGE

- 1 Discard
- 2 - not cracked out - ~~the~~ Edge of it.
- 3 - Probably do for reprint
- 4 " " "
- 5 Venus only will reprint
- 6 " " "
- 7 " " "
- 8 " " "
- 9 Discard Edge
- 10 Venus will reprint
- 11 Venus + Edge will reprint + Edge
- 12 Venus - will reprint

2nd Round Edging Machine Record

- 1 = OK - only $\frac{1}{2}$ inch
- 2 $\frac{7}{16}$ chip in $\frac{1}{2}$ inch to $\frac{1}{8}$ feed line - Edges done it
- 3 $\frac{7}{16}$ " in to $\frac{3}{16}$ of feed line - Edges done it
- 4 $\frac{5}{16}$ - chip in to Edges
- 5 Edges to $\frac{3}{16}$ - chipped in to - Edges
- 6 $\frac{5}{16}$ - chipped in $\frac{1}{2}$
- 7 $\frac{3}{8}$ - chipped to $\frac{1}{8}$ of feed line - Edges
- 8 $\frac{7}{16}$ - big chip within $\frac{1}{8}$ feed line "
- 9 $\frac{5}{16}$ - to chip - Edges
- 10 $\frac{5}{16}$ to chipped in -
- 11 $\frac{3}{16}$ - chipped in to of feed line Edges
- 12 $\frac{5}{16}$ " in to - Edges

Think $\frac{1}{2}$ are spoiled by the
Edging Machine —

Good Records passed by Eye Inspector Which broke out in Single Edging Machine

- 1 = Edged to $\frac{1}{4}$ " & broke out of face
when down to $\frac{1}{4}$ "
- 2 - $\frac{5}{16}$ - then chipped out to 2 planes
- 3 $\frac{1}{4}$ - broke out to - looks like a
bad veneer originally
- 4 $\frac{5}{16}$ - broke out to $\frac{3}{16}$ - (not originally
in but by machine)
- 5 - $\frac{3}{8}$ - broke out to within to feed line
look like machine -
- 6 $\frac{5}{16}$ chipped in to "
- 7 $\frac{5}{16}$ to chip $\frac{1}{2}$ done in Machine
- 8 $\frac{5}{16}$ chipped to to feed line done in Edges
- 9 $\frac{3}{8}$ " $\frac{1}{4}$ - Veneer pulled off Edges
- 10 $\frac{5}{16}$ " $\frac{1}{32}$ done in Edges
- 11 $\frac{5}{16}$ " $\frac{1}{32}$ "
- 12 $\frac{5}{16}$ " $\frac{1}{32}$ - Veneer stripped off done by Edges

1135 E Press 42
down 16

OK
OK

Com OK up cracked Edge in situ

OK
OK

T OK Veneer PO

T OK Veneer PO, Edge p/fly

T OK Veneer PO

OK
OK

B OK Edge v v

B OK Edge Com

V Veneer PO DISCARD

T OK Veneer PO + Edge V

OK
OK

Press 41 load 8
Blank stuck on Mould
Very hard get off -

OK
OK

T OK Edge 13 and DISCARD

OK
OK

T OK Veneer PO

T OK Veneer PO

T OK Veneer PO

B OK Edge Com DISCARD

B OK Edge DISCARD

B OK Veneer PO

T OK Veneer PO DISCARD

B OK Veneer PO

T OK Edge Very hard DISCARD

1135 E

Hoffman - make

Quant Var no free phenol
no Sandpae - 7 1/2 6/4

1% Para

Viscosity 1 minute

Blanks stick very
hard to mould

Varnish Cant be used

75%

58%

MG

1136E

2 Rounds, with Varnish
No 1134E 1 Coat,

Print Regular

1137

1st Lot put thru Mill

Required $2\frac{1}{2}$ hours for 1 gal

But Another lot put
thru same mill twice

Required only 2 hours
for twice -

14" Mill -

Twice through is very very
much finer than our regular
Var & saw factory.

I note fibre in -

1137E

Hoffman takes Reg
1019 Var 1 min Viscosity
to Newark to grind in
a mill - try it
2 Rounds for surface

Lot A once thru mill

Lot B twice thru mill -

See Book
15

NOTE

Low spots at 1 2 & 3

position due to Varrundung

starting at Edge to Varrundung

+ proceeding inwardly

Low spots at 3

Reverses start set

hole Low spot all

at 1 + all around

DEE 1121 & 1128 E.

Moulds Recd

18th.

23
24

Top

8

41
71

Bat

10

26
75

Set

247
286

Daily Production 1523 B Blanks

18th 2306-

23
24

5003
4935

Monday 22 - 1522 Mounds Road		Monday	Tuesday	Wed	Thurs	Friday	Sat
On hand	161 sets	176 sets					
Bottoms	22 Bot	22 Bottom					
Top	7 Top	7 Top					

Blanchard	day 5	day 6
Saturday 20th	2156	888
Monday	2184	1507

Luh

	Top	Bottom
May 19	17	25
Luh 20	23	9
22	27	23
23	24	36

[ITEM(S) FOUND IN BOOK]

Reexamination 1134E

fine -

1 V fine -

2 V fine -

3 VV fine surface

4 Extra VV - Diamond

5 - V fine

6 VV fine -

{ 7 fine -

V fine -

{ 9 VV fine -

{ 10 VV fine Extra -

[ITEM(S) FOUND IN BOOK]

1534 - 1141 E B.

233-239	.006
242-247	.005
238-243	.005
230-241	.011
233-238	.005
218-220	.002
232-246	.014
228-243	.015
228-250	.022 ✓
218-232	.016
246-256	.010
233-238	.005
233-249	.016
228-253	.023 ✓
230-239	.009
211-221	.010
231-238	.007
231-240	.009
231-247	.016
240-247	.007
238-245	.011
228-245	.017
226-257	.020 ✓
226-246	.020

Pressed with $1\frac{1}{2}$ x $\frac{1}{4}$ " dies in
center 200 lbs. pressure.

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 15
Notebook, N-16-05-15.2

This notebook was used by Edison during May-June 1916 for notes on experiments to improve the surface quality of Edison disc records. There are also notes by Archie D. Hoffman. The entries pertain primarily to experiments 1138E to 1188E. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted. An entry entitled "discarded moulds" provides the number of molds discarded during the week of May 15-20, along with notations about their problems and defects. Additional entries relate to experiments on edging and edging tools, as well as a "special experiment" involving prints of "Gigue" recorded by violinist Albert Spaulding. There are also entries regarding problems with the powder in the record blanks and crooked holes in the blanks, as well as notes on the number of discarded blanks and why they were discarded. Some notes are in the form of instructions to Hoffman. Inserted into the book is one loose note, probably by Hoffman. The front and back covers are labeled "No 15." The pages are unnumbered. Approximately 140 pages have been used.

12	100 %
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

67092
Acme Co.,

170 STATIONERS,
 98 JOHN ST.
 AND
 19 PLATT ST.
 NEW YORK.

In Case of Trouble
Write 1147
second page after 1164
~~1170~~

Edging Expts 12 in lot

OH-A

OK
OK

OK
OK

nick in to be resdged

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

91%

OH-B

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

/13

100%

[illegible]

1138

Press 41 Load 4

OK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

Slight OK near edge of Veneer

Com
OK

Veneer

OK
OKOK
OKOK
OKOK
OK

100%

42 Load 9

OK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

Veneer OK 7" Long

Veneer OK 4 + 3 Long

100%

1138 E

Hoffman Edges of 24 152213



blanks

Varnish P

Run Reg

2nd

Duplicate This

1139E
Press 41 Load 10

- (OK)
 T Veneer PO Discard
 (OK)
 B Veneer PO Discard
 (OK)
 B Edge - in place Discard
 (OK)
 (OK)
 (OK)
 B Edge VV
 (OK)
 T Veneer DISCARD
 (OK)
 B Veneer PO
 (OK)
 (OK)
 (OK)
 T Veneer PO

42- Load 15

- (OK)
 (OK)
 (OK)
 T Veneer PO
 (OK)
 T Veneer PO
 (OK)
 T Veneer PO
 (OK)
 T Veneer PO DISCARD
 (OK)
 T Veneer PO
 (OK)
 (OK)
 T Edge bad Discard
 (OK)

6696

This is the 1 1/2 min
where pull out. looks grey - Don't think
it clinches as well as 1 min

1139E

Hoffman

Make Can of 1 1/2 minute
Viscosity Varnish 1019

Also Can of 2 min
Viscosity,

No advantage in 1 1/2
over 1 min
Surfaces about same

Most have bad start
probably on account
of sticking to Edge & cleaning

Ott's Machine so far

is No good

Dont put Varnish on
Even -

1140E

1 Round varnished in Ott's
machine - Rubber brushed

Press 42 Load 1

Edge - DISCARD

ok
Veneer DISCARD

ok
Com Veneer

Finger Mark - Good spots Low Var - DISCARD

ok
Veneer DISCARD

ok
Com Veneer

ok
Com Veneer

ok
Com Edge & Veneer

ok
Com Edge & Veneer

ok
Com

66%

1141E

Hoffman to make 2 Rounds
of blanks with 2" x $\frac{1}{4}$ "
washers in center of the Tap
plunger, bring to contact
Cold + give 500 lbs
then lower + remove washers
+ Run Regular
Then Caliper blanks -

DISCARDED MOULDS 1 week

May 15 to 20
1916

Total	359
Dent	38
Crack	74
Knock	9
Knock + cracks	26
Spilly + Cracks	6
Surface	23
Buckle	50
Bruise	25
Hole	29
Repair Spot	9
Label	7
Run Out	2
Moisture Spot	2
Plating Defect	7
Dust to Experiment	10
Porous	9
Scratch	15
Steel in blank	2
Mechanical injury	2
Scrape	1
Stained	2
Fremble	3
Finger Mark	1
Wrinkle	1
Celluloid defect	4
Compressed in mould	2

Assume Edger now edges

800 Records in 10 hours -

Can possibly edge that
number of blanks if we
find it necessary

[illegible]

1138 E

Duplicated

Page 36-2

OK how 243

low:

OK

(6R) Low 2.

OK

OK low

OK

Com
at

OK

1- Veneer DIS

(SR)
(OK)

(OK) der

91%

Total 93%

all balled
up

Didn't Carry
out instructions

Note, not enough Var. at 3 position

1142E

4 Rounds of 1138 blanks
Varnished in G&S machine with
velvet wiper-



Print Reg

41-L 13

Edge Grooved DISCDEdge " DISCDVener DISCD

OK

OK

OK

Edge Grooved - DISCDSmall PO at fork DISPull out fast line DIS

OK

OK

OK

Vener DISCD

Com Edge Vener

Pull out fast DIS

33%.

42-L 8

Vener DISCDPull out fast line DIS

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Vener DISCDPull out fast line DIS

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

DIS

41

1148 E 5-25-16

Nothing thicker than 1 min vis
works good with Reg brushes
2 Rounds by hand

Varnished with 1 Coat

2 hour Bake —

1139 E Varnish 1019

2 min Viscosity

Edges not rounded

NOTE

With this high Viscosity,
we get Pull out on smooth part
Edge of blank or at feed line —
about 1/32 wide — streak parallel
several inches long probably
due to impossibility of brushing
Evenly with such thick Varnish

G.D.

1144

OK
OK dull edge of 1st cut OK

OK
OK

OK
OK Bull edge part OK

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK Veneer X - DISCARD after Edging

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " Veneer " $\frac{1}{2}$ "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

41 Passes round 7

OK
OK Veneer at edge $\frac{1}{4}$ - messy clean

OK
OK Bull part OK

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

OK
OK " " "

must be razed further

100%

X means OK after Edging

100%

1144 E

Two rounds Varnished to
the Edge only - of $\frac{5}{32}$ bevelled

Print Rag

Bevelled too much by mistake



Cracked in dull
part of bevel

Round 1

After Edging No cracks show

All OK Except one - Veneer pulled off
at edge -
at 2 were not edged in far enough

41-Load 12
Edges on dull black
brush mark ok

OK
OK

OK
OK

Veneer 1/16" Discard
op 1/16" in 1/16" wood Edge

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

low all veneer 3

Veneer wood Edge Discard
to

83%

42-Load 7

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

low 3

Veneer PA will edge

Veneer will not Edge
I believe

to Crack in Veneer

brush brushing

Veneer will not clean up
OK

89%

1145 E

2 Rounds 5/32 - Varnished
way over the Edge -

Print Req -

These are not so good
as those only Varnished
to Edge

NOTE

gets over Edge + Cracks strains
Veneer

Tests of Trunk Moulds 1st 1/2 well tested

E 344 Surface fair "||||| shades RO

46254 "||||| "

343E "||||| "

4587A "||||| small poor surface

101G * "||||| fair surface shade RO

3750B2 * " no snap surface loud quite R

312E "||||| NG Roughness

326E "||||| Start rough (then fair back here RO)

* Selected to test surfaces -

1146 E

Time Test

One round of 1522 B3 put over top of Case in Envelopes

blanks, 1 coat 1079 var

Vis 1 min run thru entire factory process ready for stock room - Eye tested only -

Tested for surface 5-25-16

Retest July 12

Start smooth but loud	3	1
" " Spitty loud	1	1
" " good-satisfactory	6	1
" " Very good	7	1
" " Very Very good	7	1
General Surfaces loud	0	1
" " lumpy but good	6	2
good-satisfactory	9	2
Extra good-loud	5	12
Very Very good	4	7

[illegible]

1147 = Still half as good as
Hand Varnished
Rounded Edge 1522.B
Brushed on Otto machine
with Velvet —

Rounded Edge 1522.B

Burnished on Otto's machine
with Velvet —

Press 41-load 4-all released free - OK

News SS

Blanks Cracked

5/8 To 1" in ~~in~~

4 Cases in 24 records

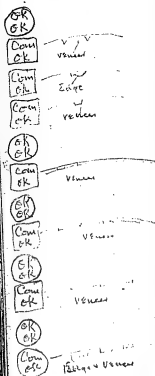
Average 89.5

looks like too much
chalk + mistake in
mixing

100%

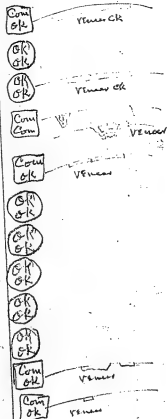
[illegible]

1137FA
A
42-load 11



155%

2nd Round
41-load 13



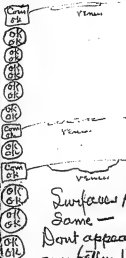
100%

1137 E

Reg 1019 1 min Vis ground
once thru the mist at Newark
+ marked A + B

41-load 18

B



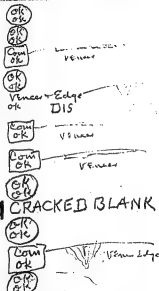
OK
OK
OK
OK

Surfaces A+B
Same -
Don't appear to be
any better than
Reef samplek

100%

100%

B Press 42 Load 2



CRACKED BLANK

83%

Special Experiment with Load _____

This load has one record Tracked
to test surfaces -

Also "Gigue" a Spaulding record
with which is always use
Blanks the face of which is
full of Steel. The opposite
time should also be tested as
Steel only occurs on one face

In Gigue I listened to 3 dupes +
There appears to be no snaps
in mould surface at start is a
Little loud but soft + good
in Music -

The Opp side surface not so good
its lumpy + start not good.

See next page

NO1 (Rain) 38-load 9

Surface -

Gique
Otherside -
↓
Oldky Home

Ry M - Surface Only 2 or 3 light snaps dull lumpy
Gique 1 snap at interval 4 1 after starting 1st part lumpy

Will keep these Records as Enacted Records
on Rack till I get a Lot -

Ky had an Eye apt 005 didn't sound

34th Print, Gique same snap at interval + same after
start of 2nd part surface lumpy } OK
Old Ky. 11111 light snaps surface lumpy

44th Run no noticeable change - Gique good
surface

72 Run Ky Very horrible start - about
same snaps in New 10

Gique - about doz more weak
snaps none loud - The ^{contin} surface
are about same -

NOTE

Our Regs. 522B

1 Coat 2 hours

1 Min Vis -

250 times placed

OK sounds OK + unclear
Micro can hardly detect
any way on hills -
good for 500 or more

1148/E

Four sounds using regular
transfers furnish 1 minute
visually -

Thrust Reg

8% time in Chalk

Epi - Max + final

72% OK — up stairs

~~4 Pounds~~ Nest wky well up
stairs when
this done

83/0

5000-Prints

5-31-16

Rejects to Baldwin

Yones	640
Edges	130
Rough Spots	104
Snaps	121
Cracks	63
Low spots	4
Wrong Comb	25
Scratches	6
Chipped	3

Nature of
Trouble

More even blank so it
will not squirt out so
much & Crush blank
with more than $\frac{1}{2}$ the discards

Reasons why Holes are Crooked
in Blanks

1st

If hole in mould holder plates are
not tapped straight

2nd

If the hole in the bushing is not
straight with the hole

3rd

Mould holder lock pins shift
moulds -

4th

Plattens on press do not come
up square

5th

Wedge shaped blanks

Q. 1
P. 1
P. 1
P. 1

Q. 1
P. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

Q. 1

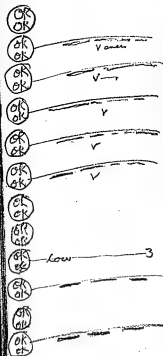
Q. 1

83 1/2

col

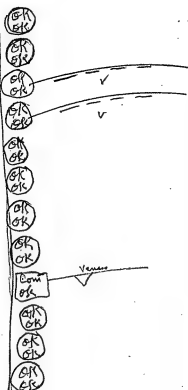
1150 E

Press 42 Load 17



100%

Press 41 Load 11



100%

1150 E

2 Rounds varnished on Oth Mac
by hand Table turning at Constant
speed, Revolutions 114 per min

One Coat regular way 2 hour bake

Print Reg

This looks good
probably more
certain than turning
by hand

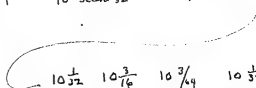
Note -

An edged or rather bevelled



Overset in Printing at X.

10" second $\frac{1}{32}$ - To -



$10\frac{1}{32}$ $10\frac{3}{16}$ $10\frac{3}{4}$ $10\frac{1}{2}$ $10\frac{3}{4}$
 $10\frac{1}{64}$ $10\frac{1}{32}$ $10\frac{3}{64}$ $10\frac{3}{64}$ $10\frac{3}{64}$

Fred Otto - Experiment

B = Bengal with 3% benzocaine.
by weight rubbed on Margin
of mouth - Not wiped off -
put on up to feed line.

B-

OR
OR

ॐ

६४



OK

OK

OK

OK



519



102

C = Benzol + Castor Oil
3% Castor Oil -

OK

OK
OK
OK

OK
OK

ॐ

GR
GR
GR

GK
 GK

25.5

味

७७५

$$\frac{1}{4}$$
$$^{\wedge} \text{at } \partial$$

The diamond shows
grooves on asphalt
part near 4 to feet
lines - could run wear
test -

First line across surface
on generally rather
loose - 2nd times
much better with
time as surface very
soft & porous.

down 3rd position

Let's Adopted this ^{unfolding} it at first went good
then finally ^{it didn't do any good at all} or very little —
5% 100% perfect,

100%
+ Perfect
Edges -

100% perfect

1151E Low 11-Press 42

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Low

Partial

3

OK

100%

1151E

Soft spot blanks -
spots that show up in
turning Very Matte
which on cutting with
knife are shown to be
very soft compared to
good part.

This is strange

1153

4 Rounds $\frac{1}{8}$ felt pad used
to put Otto "C" solution on
Edges of Mould

Lot 76
42-load 6
1154E

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

91%

Lot 75
P41 load 8
load 8

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

100

Lot 75
P 41 load 10

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

100%

P40 load 17
load 75-

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

91%

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
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OK
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OK
OK

1154E

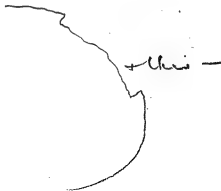
378-

754-

4 Rounds - 3/16 felt
pad used to put off
"C" solution around
Edge of Mould

Moulds as they
 1155 are (low) are
 better than (padded things)
 moulds -
 Padded Moulds makes
 things loose
 separated

like this



1155 E

X is padded Moulds -
 Records from padded Moulds -

X Edged Mould

X OK OK

X OK OK

X OK OK

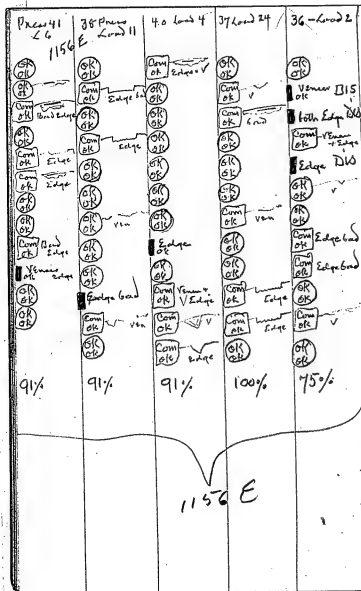
X Com Edged

X Com Edged

X Com Edged

X OK OK how 3

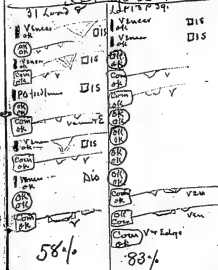
Rotten



1156 E

Hoffman

Make a bunch
of 150, don't go above
150, don't take hold there
1/2 hour, then take out
make 8 Rounds of blanks
to run reg. then factory on
this number if OK 9 will
let you know



83%

Reg Blank schedule Ray
1522B
Schedule on 1522B Blank
Bring to Contact 100 lbs -
Hold 5 minutes - 100 lbs
Steam -
Then run to 600 lbs. Hold
for 3 minutes Cool -

Press

1157 2nd Round Press 29 load 8

Blank Cracked

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

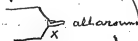
OK
OK

Latex PD

OK
OK

Broken Blank.

Peculiarity of this
blank is that Edges
tear out thus



1157E

Hoffman 2 Rounds
Blanks -

Bring to Contact, put on
Steam, hold for 3 minutes
then put on 600 lbs pressure
for 1 minute - Cool

1157 Press 40 load 12

Vener Dis too

Vener Dis too

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

PO follow

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

Vener don't
acc to go into
blank which
well -

Vener Dis -

Note Surfaces
are very good
considering the soft
thick blank -

Ethyl Alcohol

Boiling Point
Fahr

BP

Vac

52

29 inches

72.2

28 "

94

26 "

118

22.1 "

133.5

18.2 "

145

14.3

154

10.3

162.3

6.4

169-

2.4

172

0

Water

BP Fahr

Vac

32

29.82

50

29.64

68.2

29.32

86

28.76

104

27.84

122

26.38

140

24.13

158

20.83

176

16.00

194

9.30

210

0

1158-

42-hands

Com Edges, agitated bed - center most,

Vener pulled to inside - blank then - center of
blank flowed to an edge -

Com Vener Blank flowed to edge at Center

Blank flowed ready to Edge finished also

" " " " "

" " " " "

Com " " " " " Cracked

" " " " " cracked Edge

Com " " " " "

Com " " " " " Edge + Vener 20

" " " " "

Com flowed to Edge

All these flowed up to Gavel ring on
mounds & into space between,
These are very blankly. The question is
Why did these blanks flow so much

11586

Hoffman Make 1522 B Blanks
2 Rounds

Bring to Control ~~for 2 hours~~
put steam on hold 2 minutes
then put on 600 lbs pressure
for 2 minutes, Cool -

Good 8 38 p.m.

Dis flowed to top & between,

Dis " " " "

Dis " " " "

Dis Blank Cracked

Dis flowed to top & on mound & in between,

Dis didn't flow between,

Dis flowed 1/2 around into space bet mounds.

Com flowed considerably

Com didn't flow in between,

Blank Cracked

Dis flowed between mounds

Dis flowed bet mounds

90

1159

Land 13 Press 32

Auto sampler

1158 E

NG

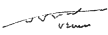
1159 E

Hoffman

Make 2 Rounds of 1522 B
blanks - Schedule: put on
steam and raise pressure at
once to 600 lbs for 2 minutes
Cool -

Run by regular 1522 B
Schedule

1160E

No - poor print all over, stuck to mirror
 not filled in end mirror or part of label.
 OK low spots 2 or 3 } Edges filled
 " " " } now flow
 low spots all over 1 2 & 3
 " " "
 " " "
 " " " 
 " " " ok
 " " "
 " " "
 " " "
 " " "
 " " "

No flow to Edges - nearly every one
 poor print all over but ^{all} ~~most~~ of the
 3/8 smooth start ok

It appears that 850 lbs at lowest
 temp of 18 lbs is not enough to
 make a full print.

1160E

Two rounds 1522B blanks
 Use regular Schedule but
 do not let the steam go above
 10 pounds pressure - you can
 probably do this by manipulating
 the Valve & watching it closely

2nd Round of 1161 - Man made a Dip

(OK) Edge not flowered

Dis - Veneer

bad surface probably
Pinchwood Veneer - Not flowered

(OK) flowered slightly

Blank Cracked in 3/8

(OK) flowered slightly

X X

Com
OK

Blank Cracked - flowered

(OK) flowered some at X

Veneer Dis blank flowered bad + part into space between boards

Dis Pin - blanked flowered, at X much

Blank Cracked in -

Veneer Dis - blank flowered bad + in between Man

Note Cracked blank in these
Experiments -

1161 E

Blank

Revised from feed line 80009
both sides

Print one Round of this

Reg Schedule -
Press 39

1161 -

Com
OK

Very little change to Edge

(OK) no change of edges at slight -

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

(OK)

no change of edges at slight -

" " "

slight change Edge

no change of Edge

Dis - Veneer

(OK) no flow to Edge

Blank Cracked

(OK) no flow of Edges

(OK) no flow

(OK) no flow of

(OK) no flow of

(OK) no flow of

(OK) no flow of

83%

all filled
Edge + all

The only explanation is that the main area of sides presses down 015 + then a little further + fills the outer edge without swelling blank

NOTE This is mechanically Very Perfect,

1163E

NOTE

This level starts from Musca first line + tapers gradually + evenly to the Edge 007 to 0075

The two sides making 14 to 015 less Caliper than the main blank

It is astonishing that the outer rim of the record is fully pressed + Venice firmly clinched. This

Edge X being flat except 1 very slightly rounded

1163E

One round Blanks 007 @ 0075 Scraped twisted

1163, Load N Press 41

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Outer edge perfect & filled

Low 3

Edges swelled just a little

Low 2nd

100%

Qualities of blanks 220 @ 235 400 as high as 250 -

Whole Records Caliper 215 1/2 205 to 235 -

Showing 015 margin - to full the taper providing Schedule on Blank presses are to keep constant products -

(101)

We have set the Power blank
presses at 600 lbs at the
accumulators & no more can
get on

Also Print presses at 850
no more can get on.
this eliminates the judgment
of the Press Operator —

850 lbs is different for cellulose
they want to stay on the
850 line so we tried printing
at 850 line & find cellulose
is ok & averages well
on Condensate so from
4th Adopted it &
all are on 850 Press
Line —

Notes — 3rd June 1916 —

Shortened time under 600 lbs pressure
in blank presses make a thicker blank.

$\frac{1}{2}$ This blank when printed flows
very much going up against covers on rings
of moulds & the center of the blank
flows into the space between the moulds
No Veneer will stand this hence low
OK percent.

In Printing if the Schedule is regular
850 lb 12 min at 120 lbs steam the print
fills always — BUT if same schedule
is used but steam kept at 10 lbs
pressure by Valves, everyone is a
poor print & don't fill — The
 $\frac{3}{8}$ start however fills — & second
generally good & if there was a fill
it would give 100%

This shows the blank don't soften
enough at 10 lbs steam Temp to
fill —

Round oil pads instead of square

Com
ok

Com
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

Discard -

oil - DISCARD for oil wide round

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

Discard for oil

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

OK
ok

66% Round Pad
NG

Yred Oth Beeswax - square
 Chamois stick - 3/4 Beeswax in Kangel

B³ Press 40
 Load 1

PO on feed line -

OK
OK

OK Low 1

OK
OK

OK PO on label

OK
OK

OK Edges - flowerment

OK
OK

OK PO fed line ok
 with some more

OK
OK

OK CK

OK
OK

OK
OK

91 1/2

No flow to flow	L23 press 40	L23 press 31
OK OK Edge flat	OK OK Edge Flat	OK OK flow some 123
OK OK "	OK OK " no flow	OK OK " all over
OK OK "	OK OK " "	OK OK " no flow
OK OK "	OK OK " " " " "	OK OK " flow one time
OK OK "	OK OK " " " " "	OK OK " all over after wet
OK OK "	OK OK " " " " "	OK OK " Bad Edge one dot
OK OK " "	OK OK " " " " "	OK OK " flow some
OK OK " shade room	OK OK " one edge	OK OK " some of black spots
OK OK " Edge flat	OK OK " flow 123	OK OK " color of run 1/2
OK OK "	OK OK " Edge flat, no flow	OK OK " flow 123
OK OK "	OK OK " "	
OK OK "	OK OK " "	
OK OK " " low 3	OK OK " "	
100%	100%	75%
Time		
Best yet		
Perfect		
100	100%	100%
		75%

1166 E.

Prints from new load of moulds
turned off s.o. 005 on side of
level.



X note pull off of Veneer due to
bad edging of angle —

B note

Black species either food vacuuming
or dirt or oil -

1167

Com
OK

flour to level

OK
OK

1/2 flow to level below

OK
OK

Edges flat - no flow

OK
OK

flour to level, not to level

OK
OK

cracked

flour not filled, look for
flour a little more on sideOK
OK

moulds, cracked, Edge flat

OK
OK

flour some at this point

OK
OK

Edge flat - no flow

OK
OK

" " "

OK
OK" not pouring enough
at Edge - "OK
OK

flow 1/3 of Edge

OK
OK

no flow

91%

015 little too
much with 200
John -OK
OK

no flow

OK
OKCracked
no flow, didn't fill at edgeOK
OK

no flow

OK
OK

no flow

some flow - Silver Spots OK

OK
OK

Chy Van at Edge, floured

OK
OK

didn't fill at edge where cracks are

OK
OK

no flow

OK
OK

some flow one edge

OK
OK

no flow

OK
OK

OK flow when

OK
OK

flour some

OK
OK

no flow

66%

All but one edge filled, when
radial cracks the fill was
looked as if Varnish them

1167E

1522 B

Berked blanks -

007 @ 0075 -

outside -

Total 015 -

Two rounds

Print Reg
NOTE

0075 is too much

0045 to 005 on

moulds is about

right

[illegible]

[illegible]

1168E

Varnished blanks
which have been baked between
high films on record racks -

8 Rounds

Evidently These rocks
will not do any Alcohol
left in seems to be
Bad - Must have
go circulation around
Each blank in
Drying even

Edging Tools Multiple Edger

Hours Run

June 6th 1916

25.5

22.5

8.5

19.2

21.2

4.5

29.2

16.7

38.7

23.2

5.2

23.2

23.2

20 Hours & 4 minutes average

1916

1170E	Load 3 42 Pcs
1st Round	
Load 17 P 24	
Blank CKI	Blank CKI
Edge Crushed	Fences off 1/10
Edge Crushed	Edge Crushed
" Cracked	" "
" Crushed	" "
" Crushed	" "
" Crushed	" "
" Crushed	Crushed
" "	" "
" "	" "
" "	" "
" "	" "
OK	OK
	" "
	" "
	" "
85%	25%
Perfect none	perfect none

Didn't Test run fence in class

1170E

Hoffman: Make a bundle of
Jacobs with 4-3-4 $\frac{8}{10}$ lbs
do instead of 4-3-4 $1\frac{1}{2}$
Want 500 blanks -

Print Reg schedule -

This looks as if deficiency
of Shellac is cause of
Crushed Edges + defects at
Edge generally. 8/10ths is not
enough want 1 $\frac{7}{10}$ possibly

X perfect 1172 E

Blank Not Edged

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
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X

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X

OK
OK

X

OK
OK

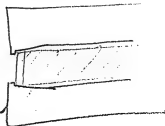
X

100%
perfect 83

75 - 75% perfect

1172 E

Hoffman



Make ~~2~~ 2 Rounds of
blanks in The Knife Edge
mould + Tell Miller
when ready

They swell a little generally
1/2 - 1/2 Extrema Edge 1/32 @ 1/64
Spalls off on some in places butt
Edge is OK up to Extrema edge of
Varnish -

See further on
for more rounds

6-9-16 June 9 1916

Lot 1065 E Some of first 1522 Records
Edges cleaned & numbered -

Put upon time test over case
in Music room
May 10 1916 -

Retested for surface
Apparently no change
in surface -

1174E
1st R

OK
OK



OK

OK

SK

uckd



155

६६

1/20/20

OK

1. PO at feed line
10K

Edge Crush

OK

Crushed 52

"

⑧

⑤

613

1

Page 32

Crushed Eggs

1 ok 

1000

OK
OK

10. 11. 2019

Crushed camp

IC... 1-55 cm

1000

Crushed Edge

✓

66-

23%

33

8%

Noise

None

Didn't level.

1174 E

Hoffman

Make 4 Rounds of
blanks 1522 B from
powder made with
shellac from 16 bbls
+ get even quality

5-10-16

After fat 157 all
powder is dried at
150@160. 1 hour after
reaching this in
Vac Dryer -
also this is 8% lime
chalk -

Continued

1172 E Not Reverted

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

100%

83% perfect.

Blends not edged

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

100%

100% perfect

Continued

1172 E

6511

5-10-16

Have just found out that our system of powder is wrong

We mix a new batch of powder 4-3-1 grind & screen

The stuff which don't go thru screen accumulates & is reground - Now this stuff is mostly fibre - to large this get ground up & its surface has very little sheen. The result is that if we start Monday we get right proportions - perhaps

$8\frac{1}{10} - 4\frac{3}{10} + 1\frac{1}{4}$ Tuesday -

$8\frac{1}{10} - 4\frac{3}{10}$ on Wednesday

$3\frac{1}{10} - 4\frac{1}{2} + 9\frac{1}{10} - -$

on Thursday $3\frac{1}{2} - 4\frac{1}{10} + 8\frac{1}{10}$

getting dryer & dryer
Chalks get thru 1st fibres
last & fibre being ground finer
& finer exposes more surface
that has no sheen on

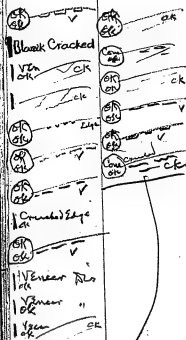
Note,

Have printed so far 3
prints are in a round
using varnished blank
not baked just air dried
only long enough so not
sticky - Prints OK.
Sounds OK, but
blank cracks just
the same,

Blanks must be too

Dry wants more
lac - Later

1177 head 14/
Pr 26



60%

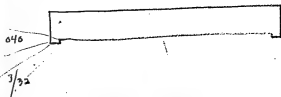
more before



Cutout

1177 E

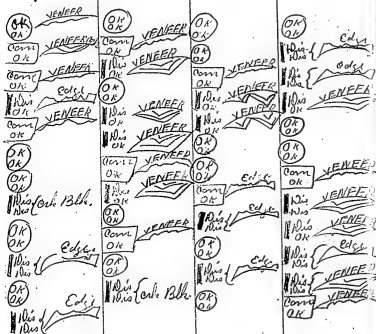
Blanks from new mould
ground by Luber



2 Rounds

This evidently is NG

1178



66%

33%

58%

33%

66%

50%

41%

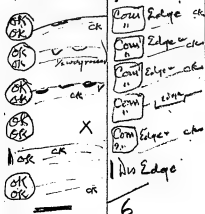
25%

1178E

4 Rounds gauged
within 010 of mesh

Print Req

1180 -
penn 42-10228



1 Vennard Old Dio
 Eridget
 1 CK to Muscovy
 OK OK
 OK OK
 OK OK
 PO OK near forest
 OK OK
 OK OK all old women
 6

1 New Edige ✓
 OK OK
 OK OK
 OK OK
 PO OK at forest
 OK OK ✓ cm
 6

66

80% Plaintiff

275-

no perfect,

1150E

Print 6 Reg- 6 Dynamics -
That are solid - no blank
inside -

6 Dummies solid metal
on the bottom - Records
are at top.

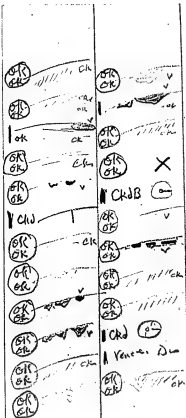
NOTE

This dont fix the bad
Edges apparently —

1181 E

Hoffman-

Put an $\frac{1}{8}$ thick - $\frac{3}{8}$ wide
around outer rim of Rubber
do as to get more powder
& harder Edge,
Make 2 Rounds
& Print



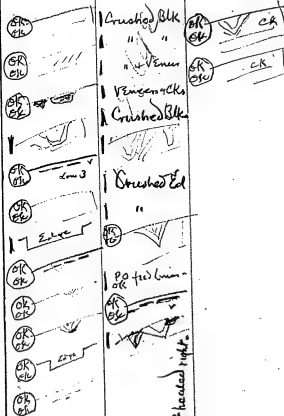
83%

none perfect

66%

8%

1182 E



83%

16%

Press probably not needed right.

1182 E

2 Rounds

Blanks made with extra ring
to prevent big rubbers plunging
from flowing -

Print Reg
1 Round run -

011
8
4
8
5
5
6
7
2
7
0.013

1179

Continued

Not Touching Panels



1180

020 44 defects
005 43 defects -

020 18
005 9

Edge

020 7
005 7

Parallel

005 8
020 15

020 11
005 6

020 1
005 10

Couch 020 25
" 005 30

Very little difference

About same as
Reqs
with 8% ~

1184E

6-13-16

4 Rounds. with 14 blanks
from new Carload of
Chalk

Print Rag

It starts at 209 Lat

Sweepings 196 Lat,

1185 E

1 Vencer Dio

1 " Dio



1 Cracked Blank



X



Egg



X



X



66 $\frac{1}{2}$

16 $\frac{1}{2}$ per foot

1185 E

Huffman Expt

Blanks, without Rubber

Pressures or Twin table -

Top hard
bottom soft

Top Hard
Bot soft

Top Hard
Bottom soft
These blanks are
very much softer
than 1 + 2

1187-E

Hoffman

Make 2 or 3 blanks -

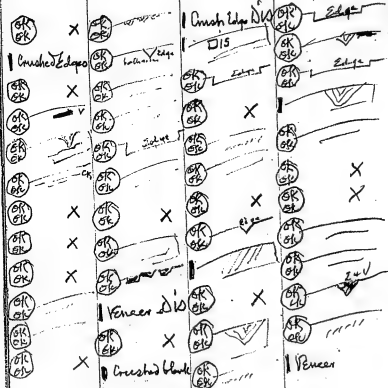
thus, going to 600 LBs

1 Cold Then put on
steam for 4 minutes

2 { 2 More same but
steam left on 6 min

3 { Dup the 4 min but
don't use Rubber packer
small pieces

1188 E

 $91\frac{1}{2}$

50% per-at

8.3%

16.5

75%

25%

83

16%

1188 E

Hoffman

Make 4 Rounds Reg
blanks but with clean
Edges around bottom
plate & bottom side of
bottom plate cleaned
of blank material

Print Req

There seems to be
no improvement
here, but trouble is
somewhere else, but this is good teaching.

2158

Average Miller & Upstairs -

June 20 -

~~80.8 OK~~

~~84.8 OK~~

~~89.5 OK~~

~~83.7 OK~~

~~43.1 Perfect~~

~~37.5~~

~~53~~

~~51.4~~

June 1 1st 2nd 6th

d 29 1	3015	2823
2	1609	2188
5	2265	2825
6	2581	2591

Average of Miller & Updegraff's Inspection
60 Rounds -

	OK	Perfect
June 6	95	82
7	92	68.3
8	91	61.4
9	81.9	55.1
10	80.3	43.8
12	86	54
13	76.1	47.5
14	83	50.6
15	85.5	51.6

1508 - 5-2-1 $\frac{1}{2}$
1510 5-2-3/4
1522 4-3-1

Final % to Baseline -

May 28	75%
June 4	80.9
5	85.3
6	80.4
8	79.25
9	70.34
12	55.7
13	66.6%
14	51-5%
15	47.5
	50.0

Out put blanks - 1522 B

May	23-	4780
	24	5003
	25	5223
	27	4223
	29	7685
Jun	1	9470
	2	10527
	3	7218 Shortmen
	5	8247
	6	9756
	7	11437
	8	12869
	9	14127
	10	8697
	12	12000
	13	12150
	14	11351
	19	9662

See Over

May	25	Total PB Moulds on hand	309
	27		339
	29		372
			421
June	1		444
"	2		457
	6		470
	7		502
	8		502
	9		521
	10		521
	12		521

1522 B Records Received by Baldwin

June	1	2192	10th	4513
	2	1694	12	7065
	3	1268	13	7655
	5	5127	14	7215
	6	5237	15	5917
	7	6056	16	7182
	8	5504	19	6020
	9	7091	22	6247

Mould holders per the Record

June	6	16	holders record
	7	15	"
	8	21	"
	12	21	"
	13	20	"
	15	32	"

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 16
Notebook, N-16-06-14

This notebook was used by Edison during June-July 1916 for notes on experiments to improve the surface quality and the durability of disc records. There are also notes by Archie D. Hoffman and other experimenters, probably including Sherwood T. (Sam) Moore. The entries pertain primarily to experiments 1189E through 1238E. Included are tests involving different presses and varnish compounds, variations in the methods of applying the varnish, and differing amounts of pressure and baking schedules. Also included are tests with a new "square edge" or "square ring" mold. Additional entries relate to diamond reproducer points and the amount of labor required in varnishing. At the end of the book are notes on the number of "girls" employed in the manufacture of records, as well as notes about piece work rates, inspection standards, the number of records produced, and the results of "drop tests." Some notes are in the form of instructions to Hoffman. Inserted into the book is one loose note by Edison regarding the reexamination of experiment 1143 in November 1916. The front and back covers are labeled "16." The pages are unnumbered. Approximately 140 pages have been used.

$$\begin{array}{r} 16 \overline{) 600} \quad 37 \\ \underline{480} \\ 120 \\ \underline{112} \\ 8 \end{array}$$

36769 21-
Stearns Co.,

MFG. STATIONERS,
 96 JOHN ST.
 AND
 13 PLATT ST.
 NEW YORK.

$$20 \overline{) 600} \quad 30$$

12 100%
 11 91
 10 83
 9 75
 8 66
 7 58
 6 50
 5 41
 4 33
 3 25
 2 16
 1 8

$$\begin{array}{r} 21 \\ 12 \\ \underline{42} \\ 21 \\ \underline{42} \\ 21 \end{array}$$

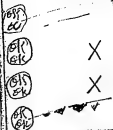
Schedule Blank presses

5 min Contact
 3. " 600 lbs
 8 " Cool
 16

Started
 June 14 1916



1 Crooked blank



75

25%

1189E

One round - blank plungers.
both move

Print Reg.

1190E

OK 21	X
OK 22	X
OK 23	X
OK 24	X
OK 25	X
OK 26	X
OK 27	X
OK 28	X
OK 29	X
OK 30	X
OK 31	X
OK 32	X
OK 33	X
OK 34	X
OK 35	X
OK 36	X
OK 37	X
OK 38	X
OK 39	X
OK 40	X

100%
91% perfect

1190E

Lot 228, Norway pulp,

One round of latest made
blanks - not edged, varnished
on both sides & edges all
over, Print in the new
Mould holders using
square edged blanks
load 3.

Print Rec

load 3

1 Crushed Edge bad

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1 Crushed Edge

1191E

One round of blanks

~~Printed~~ made in single

press

Print Reg-

Pull out feed line,

- PO.

OK
OK

Low

3

OK
OK

OK
OK

Low

3

OK
OK

OK
OK

OK
OK

Low

3

OK
OK

Low

3

OK
OK

Low

3

OK
OK

75-

none perfect

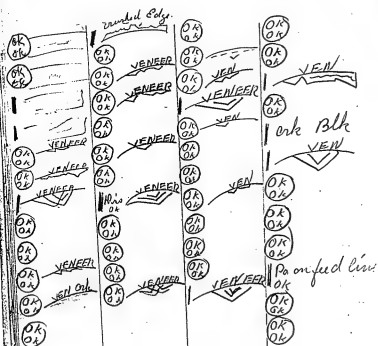
1192E

One round blank made
& also printed in
single pieces

Note the low

5119

1193 E



75%

83%

83%

66 %

35%

50%

50%

66 %

1193 E

4 Rounds

Reg scheduled but put on
final pressure of 850 lbs

slowly take one minute to 1/2
to go to 850 lbs -

Test to see if slow putting
on will stop lead edges

New Square ring Mould.

OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X



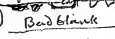
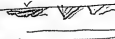


100%

76.9 perfect.

91%

58%.

Night News Square blank + mould
























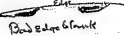


















OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	Bad blank	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X

100%
50%

100%
100% perfect

Night







New Moulds

	X			X
	X			X
	locu 1 2 + 3			X
	X			X
	X			X
	X			X
				X
				X
				X
				X
				X
				X

83%
41%

91%
66% perfect

right New Mould

OK OK		OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X

91%
58%

100%
83%

20

Daywork New Models

OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	Edge	OK OK	X
OK OK	X	OK OK	Edge
OK OK		Varmesh	
OK OK		OK OK	X
OK OK	OK	OK OK	Yan
OK OK	X	OK OK	
OK OK		OK OK	

100%
50%

83%
50%

Reg run of blanks bevelled Edges
Printed Reg 11 Rounds
Dweepings


























49.2 OK 5 4.7% Perfect,

Reg Powder new can load
Chalk low lime

95.1 OK 64.5% perfect

Day New Moulds -

This round has no lead
Gasket

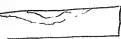
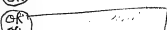



	X		X
			X
	X		X
			X
	X		X
			X
			X
			X
			X
			X
	X		X
	X		X
			

83-
41%

100%

100% perfect.

New Moulds
Without Lead Gasket

OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	 Soft spot in blank	X
OK OK	X	OK OK	X
OK OK	X	 OK from hole	X
OK OK	X	OK OK	X

91% OK

91% perfect.

83%

66%

New moulds - Small press ^{or rubber press}
or use of turn table -
1185 not bevelled - Varnished on edges

|| Lens pulled off.

Req blanko -
load in -

lead in

OR
OR



—

OK

७६

OK



کے

about have head qu

These without lead gaskets



100

83

25¢/o

OK

ॐ



ER
SC

511
5K

100

OK

— 1 —

1/10/19

ok

1

15

X

Edge

CK

X

X

x

Y



X

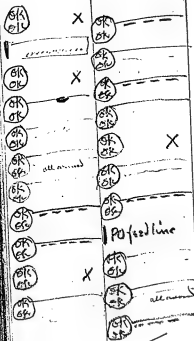
x

Edg

100%

57%

1194



91%

25%

11

90%

8%

1194 E

4 Rounds with regular
mould, but with the $1\frac{1}{2}$ "
of asbestos sheets in pass

21

○

75%.

OK

1

1

1

1

New Moulds
without Lead Gasket

OK
OK X

OK
OK X

OK
OK

OK
OK

OK
OK X

OK
OK

OK
OK X

OK
OK

Crushed $\frac{1}{2}$ in

Crushed $\frac{1}{2}$ in

Left blank

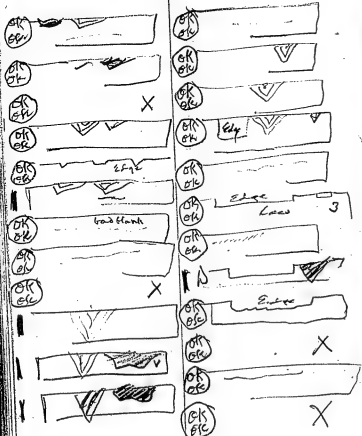
OK
OK

OK
OK X

75%

41%

1195E



66%

16%

1195E

7

Print two rounds load No 3
with square edge moulds
Change schedule from
850 lbs to 700 lbs -
for 12 minutes

This shows its just
as bad with 700 as
850 - it also shows
when get cause of trouble
700 press will be enough
as only 1 low spot
in all these -

June 18/1916

Took a rag diamond faster
reproduces as it couldn't move
then let it run on smooth
part so long at it didn't cut
them - fastest is 160 Rev
up to several hundred -

Let run it 100 hours

480 000 Rev it showed

a round wear spot probably
more polished than other
part of area —


Then tried it on rag load
receded after 400 times
it showed no wear at
all & is superior to
pink diamonds probably
because it has more
bearing surface —

Then shows Diamond well
in Cantonese hand last for 4/10

1196 E
Good Edges

OK
OK

X

Pullout Work. 



Edge

OK
OK

X



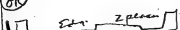
OK
OK

X



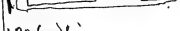
OK
OK

X



OK
OK

X



OK
OK

X

PO finish

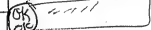
OK
OK

X



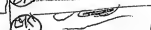
OK
OK

X



OK
OK

X



OK
OK



83.1%
66.1%

1196
Bad Edges

1196 - New Square Edge
Mould
3 with 110 square
One round with sharp
good Edge, + One round
with bad Edges -
Specially selected —

33%
none

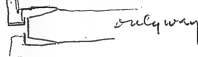
6-19/16

Only 2 things are
left that can cause
Crush of Edges + the
other troubles,

"Soft places around edge"

"Want of Universal joint,
later

Neither do it. Edge is line
of least resistance + it squashes



only way

1197E
1st

OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	X OK OK	OK OK	X OK OK
OK OK	OK OK	OK OK	X OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	X OK OK	X OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	X OK OK	OK OK	OK OK

100%

25%

100%

8%

100%

25%

100%

33%

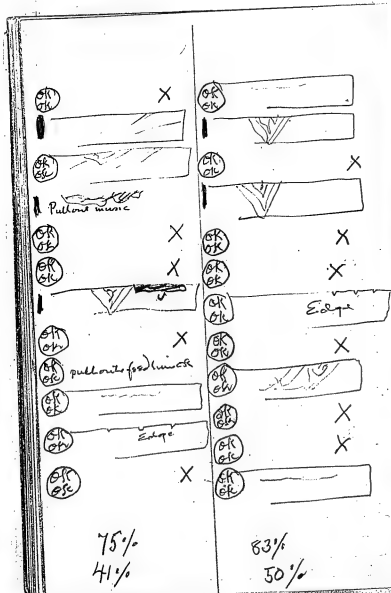
1197E

Reg Moulds -
Lead baskets
4 Rounds of Tailings
treated with $\frac{1}{4}$ of sac
additional -

Note - Pull out along Edge
This is special to this mix
with lead baskets

→ Note also same blanks
in square Edge no basket
moulds 1208E

OK & good no po on
Edges

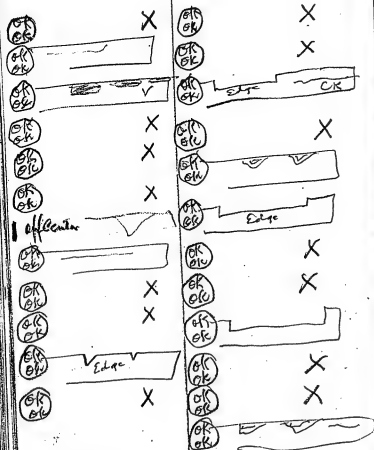


75%
41%

1198E No lead gasket used

Use these blanks in
square edge moulds
No lead gaskets

1199E



91%

58%

100%

58%

1199E

#3 load

Apr Edge Moulds
3 without flasks

2 Rounds, #3 load

Schedule,

Bring to contact needle
off pin When the temp
get to 200 Fahr dont
let it go above 200 for
2 minutes Then put
on 850 lbs for 12 min

Doubtful improvement

Load 1 = New Moulds no gaskets
 Varnished on Edge Reg 1522 Bblay
 Lot 228 new wood -

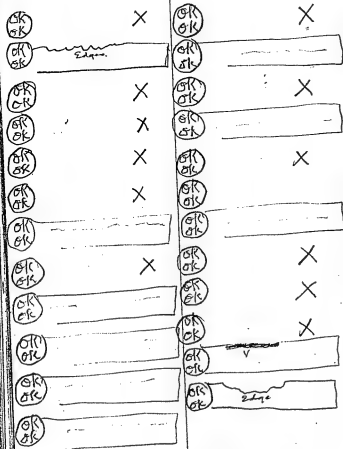
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	

11
 100%

54%

100%

75%



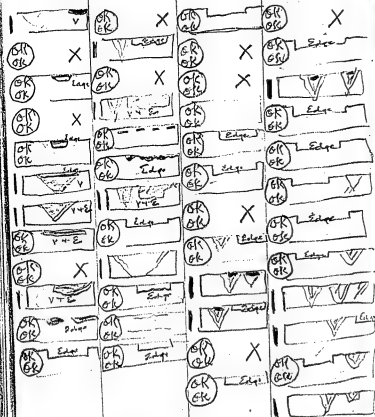
100%
50% OK perfect,

100%
50%

1200 E

Print two rounds of
Edged blank with #1
Load of Square Edge
Moulds

1201 E.



58%

66%

83

66%

25%

16%

33%

8%

1201 E

See 1211 same blanks
in New Sqr Edge no gash
mouths *Drops*

Hoffman -

Make some powder without
any Para in it just shell

Make 8 Rounds of
blanks -

Send 4 Rounds up
stairs print recorder
in Reg Maunds

Apparently not so
good as with Para
Not Certain - no improvement
in any event

1202 E

OK

1 Po.

Ⓚ

(GK)

OK

OK
OK

66

OK



८५

10

95

194

83%

33.4

OK OK

519

95

OK



OK

OK
OK

6K

6

54

④

10

6

1

5

1

1

91%

None

1202 E

2 Rounds in #1 load

Square Edges—

Varnish Edges -

Blankets made with
700 lbs Rubber
Processors

700 lbs Rubber

Recess

1203E

OK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

91%

none

Vener PD all on large
Diametric faceOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OKOK
OK

100%

25%

Vener PD all on large die

alloy oil

low 3
low 3

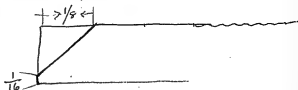
too much oil

low 2-3

1203E

Use #1 set rounds

2 Rounds of blanks.

Too lbs rubber pressure
with Extra ringBevelled off $\frac{1}{8}$ of inchUse only those whose edges
comes through edging OK.Not good = too many
pull out of Vener on large
side —

Callipers of four records 50 turned
out June 20 1916 -

Average 209/1000

High 223.5/1000

low 199/1000

200 is our old limit
This is with 600 lbs rubber
pressure no extra ring -

With 700 lbs which we
start using today with
extra ring thicker they
will be a little thicker,



1 (SK OK)

OK

6K
6K

014

OK

८८

0/0

61

6

66

9

1

OK
OK

৬৫

(B)(K)

GR
AIC

OK
OK

6K

७५

01

०१
०२

04

১৮

15

1

100 %

75%

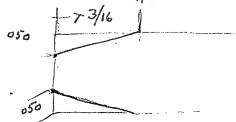
91%

66%

1205 E

New word

2 Rounds in #1 moulds



Blanks 700 lbs present
on rubber:-

on rubber-

Rent Reg

1206 E

Hand let me some
of the Discards.
from numbering
& weighing

Saw them - Numbering Machine
Chips out the next,
Read Matching next,
Hand is looking after it

1207

OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X

91%

33 1/2% perfect

100%

50%

1207 E

2 Records

Blanks made larger in
Special powder mould -

To be printed in #1 load

of square edged moulds -

Blanks to be edge 005

smaller than the inside

diameter of Mould ring

Varnished on Edges.

Blanks made with extra
ring + 400 lbs rubber pressure

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OKOK
OK

X

OK
OKOK
OK

X

OK
OKOK
OK

X

OK
OKOK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OKOK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

91%

83%

100%

66%

1208E

Print in #1 Square Edge Mould
2 Rounds of Blanks from
Retreated tailings + more
loc.

Print Bag

Drop test on Blasting pad
on floor

4 ft

1 — 1 Drop Grade —

2 — 2

3 — 20

4 — 5

5 — 3

6 — 20

Wants —

about

3/10 to

instead of 25/100ae
35/100ae

1209-E

OK
OK

x

OK
OK

x

OK
OK

ok. Blk.

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

x

83%
50% Repeat

83%
75%

1209E

Hoffman-

Can you research
+ send discard records, using
1/4 more shells so we
can make a test &
get some fines as deep as
if so let me know,

Then I'll be out of here

050 3/4

050

Finished end - Print in Regular
Words

1211

	X			
	X			
	X			
	X			
	X			
	X			
	X			

The reason I raise the
Shellac is that it probably
varies + sometimes gets
too dry @ mix + we
have cracks.
1st Extra should take care
of this variation

1212 E

Hoffman

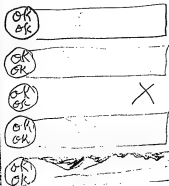
After Today June 22 1916

Use One + one tenth of
Shellac in regular Mix
until further notice -

Edwards

Aug 1 = 1st is too
rich + requires too much for
beveled Edge Moulds but OK for
square Edge - We now abandon
1st + use 1 here

245



1214E

One blank about $1\frac{1}{2}\%$

Cotton seed flask -

Big powder used -

Point in square ring
 moved, $\sqrt{\text{blank}}$ unmarked on
 Edge

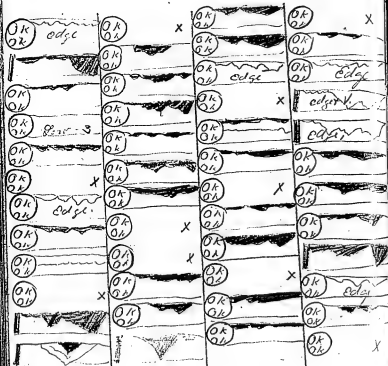
Surfaces OK -

OK OK	X	OK OK	✓
OK OK	X	OK OK	X
OK OK	Edged	OK OK	X
OK OK	X	OK OK	✓
OK OK	X	OK OK	X
OK OK	✓	OK OK	Edged
Accident -		OK OK	Edged
OK OK	✓	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	Edged	OK OK	X
OK OK	X	OK OK	Edged
OK OK	X	OK OK	X
91%		100%	
58%		58%	

1215E

Two Special Mould holders
the rings $\frac{3}{32}$ less inside
diameter than Reg new rings
Moore to Calliper up & have
them OK Then to make 4
rounds of regular blanks
Edged down .005 smaller
than rings & printed in
these 2 moulds & sent
to music room as fast as
lots of 6 are printed

1216-E



75%	91%	100%	75%
-----	-----	------	-----

16% Rest	95%	95%	16%
----------	-----	-----	-----

1216E

Hoffman

Make up a bunch of powder but put twice the amount of Para you generally use in 1522 B.

Make up 150 blanks -

4 Rounds to be printed in #1 load of moulds save the balance of blanks -

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X

100%

91% perfect

100%

100% perfect

1217E

Print 2 Rounds of 1205

Blanks in Reg Moulds
with ~~gaskets~~ gaskets

NOTE

June 23.

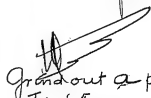
today & hereafter
1522 Blanks will
have $1\frac{1}{2}$ shells in
& be marked

1522 C

1218 E

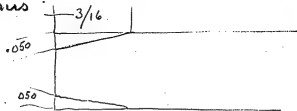
See further on

Lubr


Grind out a powder
Top & bottom

blank moulds to form a blank

thus



Hoffman make 2 rounds of
blanks to be varnished on edges
& printed in #1 load of moulds
Continue making blanks until
notified to stop

1219E

OK OK		OK OK	X
OK OK		OK OK	
OK OK		OK OK	
OK OK		OK OK	
OK OK		OK OK	
OK OK	X	OK OK	
OK OK		OK OK	
OK OK	X	OK OK	
OK OK		OK OK	
OK OK		OK OK	
OK OK		OK OK	X
OK OK		OK OK	Low 3
OK OK		OK OK	

81%
16%

91%
16%

1219E

Reg 1522C Blanks printed
in Reg lead jacket moulds
with BALLJOINT PRESS

Ball dont save
Edges

1218E Continued

1 2 3

OK
OK

X

OK
OK

OK
OK

X

OK
OK

X

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

X

OK
OK

X

OK
OK

X

91

50 % per cent.

1220 F

OK OK	x	OK OK	x
OK OK	x	OK OK	OK
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	OK
OK OK	x	OK OK	OK
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	OK
OK OK	x	OK OK	x
OK OK	x	OK OK	OK
OK OK	x	OK OK	x
OK OK	x	OK OK	x

100%

100%

100% perfect 66% perfect

1220-E

4 Reminds

Make 4 reminds first line
edged, records other are made
is smaller than the others
due to density

Print reg.

encl

1221-E

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

OK
OK

X

100%

100% present.

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

OK
OK

100%

100%.

1221-E

24 Blm. 1205-E

Varnish all over.

Print in reg. of Model
but did not use any B.
solution around the margin
of these models.

Print Reg.

1209 E Continued

1223

little if any difference
between the 1st & 12th in
1st Round —

am getting weak knees &
try it again —

1223 E

Load #1. Two moulds are
never to be cleaned or touched
or ~~set~~^{solution} used, only feather
duster is to be used,

Save the records until
24 is made as soon as
6 are made send them
down — each time —

The water affects the surface just before
the line & then generally stops,
all stop when get in $\frac{1}{4}$ to $\frac{3}{8}$

I think we should use a shade more
varnish than now, but very
little as alcohol affects the
stability of the blanks, tends
to weaken the edge & produce
Radical Cracks or also
Cracks which permits PO of
Rusai —

6/28-16

Soaked ~~the~~ records in water
20 minutes



	OK	DISCARD	Bad to hear	OK Only little
Reg	II	III	II	III
Very much	III	I		III
Medium				III

Medium means one coat of Varnish
is put on a little thicker than was
put on regularly
Very Much Means Varnish put on
quite thick so it takes some time
to dry —

Reg 100
85

Medium 91
58

Very much
91
58

1225^E

5 Blacks soaked $\frac{1}{2}$
in water, then dried

$1\frac{1}{2}$ hour —

Varnished

Printed Reg

After baking 3 warped

Very bad — sent 2 to
print —

The 2 print OK + sound
fair —

30th June —

On June 29/16 - 116 moulds discarded
being all discarded on that date.
Had recorded following number of seconds

223	155	88	458	83
326	202	151	488	75
261	380	151	264	136
164	448	217	136	328
237	175	170	130	318
229	325	231	214	18
231	297	272	36	462
325	278	260	36	75
67	258	227	227	138
164	48	181	260	30
219	385	370	272	19
237	318	54	151	45
125	19	110	68	2
325	261	398	142	2
174	221	462	61	
155	223	49	347	
167	235	214	174	
202	12	163	191	
292	299	145	176	
380	12	373	258	
448	355	446	362	
155	175	862	1124	
	325	59	188	
	297	59	1124	
	124	196	46	
	124			
	152			
	217			

Average 245

OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK low 3	OK	OK	X
OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK low 3	OK	OK	X
OK	X	OK	X	OK low 2	OK	OK	X
OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK low 3	OK	OK	X
OK	X	OK	X	OK	OK	OK	X
OK	X	OK	X	OK low 3	OK	OK	X
OK	X	OK	X	OK	OK	OK	X
OK	X	OK	X	OK	X	OK	X
OK	X	OK	X	OK	X	OK	X

100%

100% perfect

100%

91% perfect

100%

58%

100%

100% perfect

1227 E

July 3rd 1916

Spent on mixing

Put in fibers & lamp black

Mix well then add

Shellac Varnish

Mix fairly well then
add chalk & mix

till it appears OK

make ~~the~~ four rounds

hold the facades —

~~best~~ test for Water proof —10 min soak in water — OK only in
one surface of G did notice slight
RO effect due to water — Think this
way of mixing is an improvement but
not sure for wood

OK OK	X	PO	
OK OK		OK	X
OK OK	Round form	OK OK	X
OK OK	form hole	OK OK	X
OK OK	Pull out -	OK OK	OK
OK OK	X	OK OK	X
OK OK	X	OK OK	form form
OK OK	X	OK OK	X
OK OK	form big -	OK OK	OK
OK OK	X	OK OK	X
OK OK	form	OK OK	X
OK OK	OK	OK OK	X

66%

41

83 1/2

66 %

1228

Reg blanks -

Coat one layer Varnish

Dry 2 hours then another

Coat dry 2 hours -

Print 2 Round on

Weak moulds -

Two Coats seems

impracticable -

[illegible]

1229-E If necessary This
to OR —


Make a bag of powder
3 coars & check 1 to
day —

Run thru 4 rounds
on special Moulds load 50
Keep balance of powder
till Larry make up -

Drop 4 ft on blatter

1 - 5 turns 9 - 1 turn -
2 2 10 - 5 -
3 6 11 - 2
4 1
5 2 12 - 3
6 9
7 7 Hawaiian also fine acrifone
8 1 Hils opposite side rough -

July 6 1916

Re test of 1226 1227 + Reg
records not edged -  soaked
in water ONE HOUR.

The grating sound or run out sound
on 1227 + Reg are about the
same, if any change its favorable to
Reg -

1226 is better than either 1227 or
Reg for Run out + general surface
as far as water proofing + surface
to a distinct improvement

Edge are swelled very bad on Reg
" " not so much on 1227
" on 1226 are very little swelled

1226 Best

Dunividdie West coast & Calliperia
Reg blanda -

236 -	251	15
236	259	23
241	263	22
240	256	16
282	245	13
240	267	27
243	250	7
226	253	27
229	248	19
223	251	28
242	255	13
244	255	11

Roller

1230 E

One round of links made by
Dunividdie in new pacoas
loading machine -

Calliper

247	260
241	260
250	265
242	254
252	260
236	248
243	251
237	249
249	264
244	247
243	247
263 -	273

High 263
Low 236

Should be 240
@ 245

13	252	257	5
19	245	255	10
15	238	255	17
12	226	247	21
8	252	258	6
12	239	246	7
15	243	252	9
3	238	249	11
4	239	256	14
7	248	266	18
	249	254	5
	236	249	20
	242	254	266
		226	

too much a too
much variation

Drop Test July 8 1916
Regulars

4 ft drop flect on Blotting
Pad of my desk

of Drops

9
3
14
10
20
6
10
17
4
20
10
20

This is good
Enough to
as Dropping from
hand on Carpet
unless reverse

Will drop 6 discs
twice a week to check

(1916)

July 12 - after 33 prints
Examined 12 records 2 months old
They are OK, for 2 weeks

11 @ 12000 Varminished blanks
July 17 daily 20 girls days
4 men nights -
4/10th Cont End -

After Varminishing blanks
there are several holes a
pull out rough spots with
a number of holes -
key Spacing each with a
very small quantity Varminish
6 printed this way - 6 faces
got 19 snaps Unspotted
on another set made
got 45 snaps - looks as
if Spatting diminished snaps

123KE

Load 50 - Keep running
night & day - test 2 records daily
for surface

1233-E

Load 51 has mounds with
No Mottle - They are
running them to see
if Mottles develop -
upto 50 rounds I examined
10 faces - 7/14/16 -
No Mottle ^{Mottle} Very slight only traces of mottle
4 3 3

Surfaces on most were good -
Can't say if there wasnt some mottle
originally -
3 the original 12 - 3 were discarded
1 for eccentric 2 for Dents,
4 off for repairs - Dents are from
mean if blank falling on mottle &
pressed -

1234 E

Blanks with holes in -
prepared by touching with a
spot of potassium at hole

where Pot in blanks many
deeper spots touched -

July 17/16

1235 E I would run
continuously & not washed

Kalmia Valley

good satisfactory Run

1st			Start not good - general uneven. Better in about 1/2
12	-		ditto
24	-		ditto
36			Slightly louder
48	-		Same
60	-		Same
72			Same
84			Same
96			Same to improve
107			Same
120			Apparently just as good as about same. (think better than 1st)
132	-		Same
144	-		Same
156	Cracked		Rough start, slightly irregular
178			Very "Reject"
190			
202			

Start bad - Reject

These were not printed in New
would with square ring

Josephine Park Opposite Very good record
1st Record, surface still better than Kelly

101	Surface V even	Start fair -	
12	-	-	Surface even V
24	-	-	ditto
36	-	-	ditto
48	-	-	ditto
60	-	-	ditto
72	-	-	ditto
84	-	-	ditto
96	-	-	do
107	-	-	about same as when start
120	-	-	OK Snap repair
132	-	-	OK same
144	-	-	
156	Cracked		
178			unstable
190			in late (will improve)
202			nearly as good as start
214			gelling, (all 1/2 stormy)

Start too loud -

OVER

This probably accounts for bad start

1237E

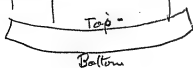
Experts to find out what hives moved

2 Discards 4524-C-E-199 Dent 57 pms
4514 C C 178 Dent 65 pms

Put 005 crushed glass about 50
pieces scattered all over blank - put
top on, let it drop $\frac{1}{4}$ " then had it
printed.

Blanki-

The warping is always
There



Always convex on the
bottom -

1/3rd are flat why?
Sometimes 50% dead
flat,

As there are pieces falling

Girls

Varnishing Dept	59
Orling blanks	6
Printing	1
Sorting Records	5
Eye Inspection	8
Machine Test	6
Edge Inspection	4
Mould test	9
Numbering Sorting	11
Index, Wdly, inspect	60
PB Inspection	6
Matrons	3
Office	5
Repair Room	21
Cellular Print room	5
" Dip	4
Clerk	1
	<hr/> 214

Details

- Varnishing Dept
- 20 Varnishing
 - 5 Carrying blanks to dry rack (unusual)
 - 5 filing Records for exams
 - 5 Taking from Rack after water removal
 - 6 Examining & inspecting for scratches
 - 3 taking Van blanks from length & putting on record rack for delivery to Orling & Parcel

1238E

Experiments 6 lots 12 each
blanks with 19 lb disk on
Season + every day College
one lot for dishing -

Daily Report Inspection -

	Comed	Perfect	PO	Round	PO new ring
19th -	92%	66.9	15%	50	none 20 R ¹⁰
20	88	63.2	17%	20	none 50 R ¹⁰
21	93.9	66.8	14	50	75 - no PO.
22	93.3	56.6	20	40	70 - none 1 ill
24	89.87	55.3	37.5	60	102 - none 2 ill
25	90.2	59.2	34.5	60	109 - no 1 ill
26	86.8	48.7	39.1	60	105.4 PO - 4 ill
27	92.6	58.62	34.3	60	127 6 PO - 5 ill
28	93.44	59.55	33.6	60	145 2 V ¹⁰ ill
29	94.6	56.3	26.5	55	111 - all OK
31	93.1	56.7	34.5	60	132 all OK

Blank Record

10 hours

1700	25 ^c
1750	27
1800	28
1850	29
1900	30
1950	31
2000	32
2050	33
2100	34
2150	35
2200	36
2250	37
2300	38
2350	39
2400	40
2450	41
2500	42
2550	43
2600	44
2650	45
2700	46
2750	47
2800	48

Records recd by
Baldern

July 14 7639
15 5080
X X
17 7006
18 4132
19 5127
20 5138
21 2797
22 3427
24 5089
26 5387
27 3898
28 5236
29 5236
31 4481

Blanks Made

July 19 15371
20 14745
24 9375
25 12755
26 14852
27 4659
28 16473
29 14691

Months

546
546

Months may 1915

Drop test Reaps

11	12-6-9-14-8-61	45
12	20-4-6-5-10-20	65
13	2-8-17-2-13-13	35
14	15-5-5-8-1-9	43
15	2-20-20-8-12-20	72
17	20-10-20-1-20-19	90
18	9-18-3-20-12-1	63
19	12-7-19-20-2-10-	70
21	20-3-1-9-13-7	53
24	8-14-20-2-5-20	69
25	20-3-12-20-4-9	68
26	10-11-9-5-7-20	62
27	20-15-8-3-20-20-	86
29	18-7-20-10-3-20-	78

* new 3/16 Taper blanks

Average Miller & Up Series about 720 Records

	OR	Perfor
June 20	80.8	43
21	84.8	87.5
22	89.5	53
23	83.7	51.4
24	89.2	65.9
* 26	97.8	81.81
" 27	99.1	81.87
" 28	94.9	80.40
29	96.74	89.38
30	97.22	89.79
1	95.9	90.20
5	96.58	83.50
6	96.57	85.14
7	91.3	81.36
8	97.6	83.5
10	95.69	84.2
11	94.3	81.8
12	95.	76.57
13	92.7	79.6
14	91.9	76.3
15	92.97	74.2
17	93.	73.8
18	92.1	67.
19	92.	66.9

up stream front old edge

61457

Point for Inspector

Hoffman - Platens,
" Scored rings
" Dirty ledges,
" Steel, in blanks,

Rincher -

Slabbing oil on Edges
Scored Edges & polishing
Drill Diamonds too many
Edging Discards,
Dead Moulds are in rotation
before a while Edges are ailed

June 24 1916

Sheller stock 65.00
in My Warden 233.00
outlooked August 22.5 and
July July 1.00 acc.

[ITEM(S) FOUND IN BOOK]

1143 E

Reexamined 1160 27/16

- | | | |
|----|--------------|----------------|
| {1 | good | slite RO |
| {2 | fair to good | |
| {3 | fair | slite RO |
| {4 | found | old pair mouse |
| {5 | fair | RO |
| {6 | fair | RO } old mouse |

Two Uncle Van & Milk

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 17
Notebook, N-16-07-21

This notebook was used by Edison during July-September 1916 for notes on experiments to improve the surface quality and the durability of disc records. There are also notes by Archie D. Hoffman and other experimenters. The entries pertain primarily to experiments 1238E through 1261E. Included are tests involving different presses and varnish compounds, as well as variations in the amount of heat and pressure during baking. Flaws and successful results are both noted. A notation on experiment 1257 indicates that the resulting blank "appears to be the best blank and record we ever had & should be made standard." Also included are two lists of flaws observed in discarded record molds, numbered 41-199 and 1-48. At the end of the book are notes on the number of "girls" employed in the Disc Department, as well as notes about piece work rates, inspection standards, the number of records and molds produced, the number of discards, and the results of "drop tests." Some notes are in the form of instructions to Hoffman. Inserted into the book are several communications addressed to Edison from G. H. Baldwin, Joe Miller, and John F. Ott. The front and back covers are labeled "17." The pages are unnumbered. Approximately 100 pages have been used.

Old Transfer Records - listed July 21

Run out of light fixture

Light RO all down

" "

OK

Inquiry Repeat

VR good RO 1/2 way

VR good RO 1/2 way

VR good the RO

VR good Light RO

RO all way then

RO 1/2 way then

Light RO 1/2 way then

RO all way then

1/2 way then - 1/2 way then

Here RO all way then

RO 1/2 way then

Light RO 1/2 way then

RO all way then

Daily Halpin rejections -

21st

Retest 45 Records 9 Rejected -

1st Snop - hole in blank

2 2 snops - 1 018 Pull out 1 007 Pull out Varnish

3 1 group 4 moderate snops - paired - require blow

4 5 Big snops - in group - bubbles in Var. holes

5 Eccentricity - OK -

6 - Center hole too small -

7 Low spot, ok. hardly notices it

8 Eccentricity OK -

22 July

46 - 5 Rejected - bad inspection, snops -

23 July

19 - 1 Rejected - Rough surface only bad on start
Plastic deteriorated on small ca. 1/8" x 1/2 inch
other part OK -

26th - Retest 45 - Reg 5 -

27 45 - 3

July 26 1916

We find that rough start & final rejection of moulds due to rough surfaces is due to putting blank on Aloud without a pin - The men lay them on & move them - that puts in radial scratches on smooth part & also on 1st 1/4" of music to 1/2"

By using a ground Matrix & buffed with all scratches out & by using a long boxwood pin the blank can be put on & record taken off - 50 blanks 50 records without a single scratch or injury to mould when 1 revolution of mould at 220 line is examined under microscope

The pin is 005 taper made of boxwood so fibres cant be wound round

Dropping the boxwood pin
on Mould Matrix produces
no injury

We noticed that feather
duster makes a few fine
scratches too fine to
be heard on record
& only 9 of these with
50 blanks set on a
taken off -

Evidently Condensate or
dust gets on feathers -

Tested stard of 9 Moulds
Records 9 of old Mould
9 of New sgr edge

Practically no difference

Hoffman is trying some
'Brass Bright' polish
made by Sherwin
Williams Co Newark
for cleaning mounds
to prevent sticking
& pull outs -

Hoffman tried Nickel faced
mounds, steel highly polished
& also Watts surface
but all made pull
outs -

He made some Experiments
on Waxpenny or
rather deshing of
mounds

Taking out 3 rounds
from the same mounds
There seemed a coincidence
as to deshing -

One mound gave 20-20-15
another - 3-4-4-

There were others like this -
he will make some more
test,

New Mexico song, Reed
~~27th~~ 23.

July 29/16

This works better under
same conditions of
weather & all than
1 to Lac

Hereafter Use
only 1 Shellac

1238E

1522 Blank

Hoffman

Run through one
batch say 400 Sheets
with 1 Shellac instead
of 1 to 4 have them
all printed under
this number &
4. Rounds sent me
note pull out
on your moulds
as well
works good

OK OK	Low 3	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	100%
OK OK	Low 3	OK OK	Low 3	OK OK	OK OK
OK OK	X	OK OK	X	OK OK	OK OK
OK OK	X	OK OK	X	OK OK	Ven
OK OK	X	OK OK	X	OK OK	OK OK
OK OK	X	OK OK	Low 3	OK OK	OK OK
OK OK	X	OK OK	X	OK OK	X
OK OK	Ven	OK OK	X	OK OK	83%
OK OK	Ven	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	
OK OK		OK OK	X	OK OK	
OK OK		OK OK	X	OK OK	
OK OK		OK OK		OK OK	

1240 E July 29/16

This is 1201 powder
without Para - that
is saved & now made
up - powder is
old
3/16 Borelled blanks used

Keeping this powder
has done no harm ~~and~~
Although technique
is changed - they work
as good as Regs Today

[illegible]

1241 \equiv

1241 E They Edge Easy
H-66 OK - no trouble

OK - no trouble

Hoffman Load Granks
from Center & Spread so
we get soft Edges -


4 Rounds —

test if OK, then

Have them Edged &
see if they are soft
Edges & Edge good
Edges all in one
mixture

41st Record - $3/16$ from music act has
 few very light faint scratches -
 Most of the scratches are $3/16$ from
 music & there are thousands of them
 about 016 long
 Notice scarcely a trace of scratches
 on feed line past - Think this
 technique with Dowel + pin for
 put on & take off will stop
 loud etal on records

Should find out why any
 scratches come on next to
 music, No reason for any

65th print  few more scratches

but OK - Mould OK yet.

79th had knock in both sides repaired
 96th OK - surface about same
 not many more scratches near
 feed line as 11th & 6 lines, haven't any
 more scratches that had way back
 good for 50 or more prints or more yet

133rd print about the same as to
 surface - few knock at start of marriage
 bell that was on 96th

1242 E

Heart throbs & irregularly with good
 surfaces, marriage to when better
 both conditions - millions holes in
 bottom of groove in copper hill line

New mould, Dowelping

New Record moulds in -

These to 62 put in a load
 + printed right along & records
 saved & sent to Edison -

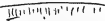
First heart throbs

23 scratches probably all ad

Marriage Bells

61 scratches probably all ad

after 41 Records very few scratches except
 near edge



$3/16$ next to music
 scarcely any

CR

1243E

Haffner

Few blanks & check 1
shellac for submarine
blank spot

1244E

Hoffman

1 Round blank's regular
schedules, but hold at 600 for
 $\frac{1}{2}$ The usual time, send to
me - Coal 10 min

Calliper for dishing

015-
035-
027
049
042
037
020
025-
048
040
050-
025
413

0344

1245E

Hoffman.

One round blank -
Reg schedule, but 500 lbs
final - Coal 10 min

Send to me

Calliper for dishmy

040
048
042
035
019
045
038
025
030
018
006
058

0337

1246E

Huffman

1 Round 6 blanks -
Reg schedule except
400 lbs - ^{has min. half} Cool 10 min

Send to me

Caliper for Dishing

035-
016-
035
039
043
006
024
027
038
045
040
038

$$\begin{array}{r} 12 \overline{) 386} \\ \underline{36} \\ 26 \end{array}$$
 32 .026 average

1247 E

a

Hoffman Made blanks

One round - Bring pressure
right up with heat on - hold
for 5 min using 600 lbs
Cool 10 min -

Top plate good bottom a little
cloudy - Could use
plates again with and
cleaning - Blanks good
surface

1248
Dished -

1247

030
050
029
050
043
035
042
032
045
038
045
024

035
035
043
032
034
035
034
026
052
055
035
032

average 0388

0376

040

1248 E

B

1 Round blanks - Put
heat on & bring pressure
right up to 400 lbs for
3 minutes - Cool 10 min
Blank thicker than 1247
Top plate fair - bottom
all cloudy - 2 bottom
rough -
blanks fair surface.

for Calliper see
1247 E

1249 $\frac{1}{2}$ LUCK!

One round

Bring Hawks up to

boobles Cold, then put

steam on for 3 minutes

Cool 10 min

Moulds clean

Good surfaces on Blanks

Caliper off Blanks - Caliper for checking

248-242	-	000	000
247-252	015	000	
229-220	009	000	
245-248	017	000	
252-250	002	006	
242-245	017	005	
255-240	015	000	
257-237	020	012	
252-246	036	010	
254-250	004	000	
250-235	015	006	
246-241	005	000	
255	13.5		

0024

5	5
1	1

1250F

1 Round.

press to 600 lbs COLD.
then, put on steam and
hold for 6 minutes Cool 10 min
Send to Edison.

Moulds clear

Dieter	242	232	010
006	244	243	005
000	251	242	009
010	240	234	002
000	245	230	005
010	248	239	009
006	246	238	021
010	248	236	009
006	250	254	001
012	241	237	004
009	243	230	013
0066	248	240	008
	246		

008

1251E

1 Row

Blanks Double pressed

Reg sch except 4x6 lbs, cooled

put back + reg sch 6x6 lbs -

Dished

after 20 hours

	000	007
	000	000
	000	004 app
	000	000
Warm Casts	018	008
	010	026
	015	045
	015	015
	000	009
	000	000
	000	000
	000	012
	005	0105

Remember Top + bottom plates
are dished in many cases
several thousands

Aug 3/16

When blank shows bright spots on one or on both sides opposite it is probably powder was rained on or water got in powder this gobs pieces $\frac{1}{8}$ to $\frac{1}{4}$ together was loaded & then shows up bright - These spots are soft to the knife - When blank dry & are cut they look gray

At the Margin of Wet & dry sometimes caused a pull out in record, showing a circle around the water changed particles -

Cut 25 Records which had raised implying there was a Dent in the ~~same~~ mould but found there was a soft spot (water) just under varnish which raised Varnish after pressure off these due probably to spittle marks on blank or spittle or rain spray in powdered - One bag one was piece of bag fibre - not in record.

Notes

Many times we find a record with $\frac{1}{8}$ to $\frac{1}{4}$ circle on record the edges which show pull out which makes it conspicuous -

This is due to a putty like soft combination of Chalk & shellac only - We find these shiny spots on blanks -

This material gets in powder from Dead End in mixed - & the powder probably need wet over screens

Little marks on blank, or water
spray in powder, when near
surface will raise varnish
up & make knots & generally
a desired fibre will do the
same also wood pulp without
shellac,

Black should be impossible
for fibre or light colored
spots -

I do not think there isn't the
would,

1249-F	Quis.
--------	-------

8/4/6

1249E — *Imp.*

4 Rounds

Varnished twice. 1st Var
then another beautiful
& immediately varnished
again, 1 bake

Records show scarcely
any dishing - 8/10 flat,

1349-E Ruy.		846	
		x	
		x	
		x	
		x	
		x	
		x	
		x	
		x	
		x	
		x	
		x	
		-	
83%	100%	75%	83%
50%	75%	41%	66%

1252

Haffman
& Rounds, -

Duplicate of 1249 but
with latest blank one of

Shelker

4 Rounds to go up stairs.

Has 4 Rounds on hand

1 1/2 old would ~~be~~

[illegible]

1253.E

1. Lac blank

Yarnish 4 rounds, put on
one brushful of Yarnish
all over & then immediately
another brushful - Same as
1249 was Yarnish
The blanks are pores.

One take lig -

Print in new ring moulds

One shellac + 2 more 600 lbo (ced)
+ only 3 min press is not
ok requires 3 1/2 to 4 min
I guess -

Surfaces are better than
Paper nearly every one has a very
light run out hard to run to have
the 3-2 @ 4 min press time
will be better

138th Print is OK both sides = 2 Veeney times
In 1 Revolution only found 10 scratches
on 1st 18 lines of mesh 018 to 040 long
& very light = practically no scratches
on smooth part where there are a
hundred on Copper with this many
prints -

Thick plated nickel is certainly
not scratched by pulling
on these blanks

Notice very little difference between
2nd print & 138th - same little snags
are in both & feel surface
about same - No new snags
have come in -

Nickeling seems to be an
improvement - Yes 256th show you

~~Justine on 256th but press mottling~~

~~256th times - better Nickeling~~

256 times - better Nickeling OK
horrible run out press mottling
cut out -

1254 E

Press nothing ⑩
Amorphous Copper is obtained
to stop press mottling nickel will
plating surface well

Two heavily nickel plated

models - to be put in
a lead & run till
further notice -

Every one sent to Evans

182nd Print - general surface a little smoother
at start with several big snags & a big
pump near end - then getting fine -

Value plating, OK but about little off -

No scratches on smooth or 1st 18th feed line except
3 or 4 minor ones - but 1st 18th top of which
is more mottled than farther in -

One piece Ni pulled off 203 units 030
long



at least around
this is in Hengman
clear

Nickel is probably an improvement

1255 €

[illegible]

100%

91%

83%

91.2%

63 1/2 perfect

66/s-

50%

507/2

57.2% Perfect, 91.5 general Council

1255 €

Hoffman 4 Rounds Reg

One Spore Mac Blank, powder

Bring to 600 lbs pressure. Cool
then put on steam for 4 minutes
then Cool. 10 min

Planks to be varnished all over
with one brushful & then
immediately varnished over
another brushful - One bake

To be printed in new
square ring mould
~~for the~~

1256 E

[illegible]

1256 E

4 Rupees Register. One
Shellac blank)

Bring to 600 lbs. Cold
then put on steam for
5 minutes coal 10 in

Blanks to be varnished
all over using one brushfull
immediately followed
by another brushful -
one lake

To be printed in new
square ring mould.

1259-E

[illegible]

1259 E

4 Rounds Use irregular

1 shekhar powder

Bring up to 600 Lbs Coal,
then put on steam for
8 minutes, Coal 10 min

Vermish with one breakfast
of Vermish immediately followed
by another breakfast —
Take

Print in News-Age case ring moulds—

Send to Emerson

7 = Blank schedule Can Vary from
5 min to 7 min without great
variation in discards - This will
take care of variations in powder

8 = in water 40 min surface not harmed on reason
dents 60 " " just perceptible -
" 2 hour " "

Grafite is a very bad thing
on blanks - grafite gets in
grooves & after a while
pulls out & makes a
bad knock -

note

Notes on 1257

1257 appears to be the best blank
and record we ever had + should
be made standard = 4 wood 3 chalk 1 shell
its the strongest, all dropped 20 times
without breaking any of the 6 tried

2nd It is easy to Edge 4 mandrills 6 each
Edged with one single edge which
is twice as much as regular 4 man
reports it will do more.

3 The flatist record yet average
dishing .098. Highest to lowest
thickness average 216 To 208
average variation of thickness .086.

4 100% Comet perfect 97.75

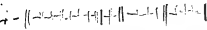
5 = Has nearly twice as much varnish hence
better surface - more water proof - softer
not so susceptible to make dents.

6 = Blank moulds keep clean + go
several rounds without cleaning
guns high % + no pull out

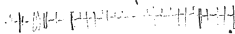
to be printed in new square edge
run moulds. This leg will make
about 1200 per day = 1 This output
under these conditions is to continue
till otherwise notified

Amorphous Copper

324th Run

Start fair - 

600th print

Start fair - 

Its pretty fair - general surface good but too many small imperfections none of them hard or objectionable, but too many for a good second

off -

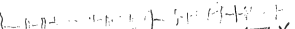
Mould of hard Copper -
2 Snaps -


12th surface fair -

36 " better than 12th
109th " still better The general surface is very soft & velvet better than any tested for long time - The Mould originally was stained bad & they couldn't clean it had it been a good mould & niched it would be perfect, There are many fine snags but this is due to the defect mentioned

This is a winner

217
Prints -


good yet surface 3/4 from start. V. balance good.


good yet after 1st wash balance is like a second only 75 minutes old - all imperfections are good & should rather than have got rid of them. It should run 600 times in 700

Qty of Recovered fresh alcohol
0.830 spec should be

Proportions = 1522 blanks (1238)

Varnish for powder

257 lbs 10 oz TN Lac 5 lbs extra for dirt
900 lbs Alcohol
1.3 lbs Para 583.2 gms

Each batch in mixes consists of

57 lbs Wood
43 " Chalk
2 " Lampblack
Total 102 lbs

The above amount of Varnish
will make 18 batches of

102 lbs each -

Total 2065 lbs

50% Wood
37.5% Chalk
12.5% Solid Lac

This is 4-3+1 Lac

4th Dec. - Records

- 41 - Brunei - Piece sand 026 -
- 50 - Brunei - Tack in blank
- 51 - Dent = 4 big marks $\frac{1}{4}$ " from feed line
- 52 - Dent = Chip in record $\frac{1}{4}$ " from feed line
- 53 - Dent = 18 Prints 2 Dents $\frac{1}{4}$ " from feed line
- 54 - Brunei - 42 prints - 3 big irregulars -
Dunwiddie found it was Mould Gate Lever
- 55 - Bubbles - 63 prints. Nothing on opposite
side - tried to repair - NG
- 56 - Dent = 11 Prints - Tack in blank
- 57 - Dent - 3 prints - Big piece $\frac{3}{4}$ dia white,
cement or quartz, muddy - some part fract.
- 58 - Dent = 72 prints $\frac{1}{4}$ " from feed line
- 59 - Dent = 3 prints - $\frac{1}{4}$ " from feed line
- 60 - Too Crackly = Its Crackly but this
is based on 1st print which is queer
but probably 3rd print would show.
Mould was OK

- 61 - Dent = Big dent radiat starts $\frac{1}{4}$ "
in smooth - goes $\frac{1}{4}$ in 11/16 to wide
think mould is unjured
- 62 - Brunei = 115 Prints - Quartz, muddy $\frac{3}{16}$
dia
- 63 - Dent = 28 prints $\frac{1}{2}$ " from feed line
020 wide $\frac{1}{4}$ " long
- 64 - Bubbles + big - Clancy, fault
- 65 - Dent - 36 prints 015 x $\frac{1}{8}$ " long on feed line
- 66 - Brunei = A tool or steel has
scraped mould and $\frac{1}{2}$ long 030 wide
- 67 - Label scratches in cleaning -
154 records - should not have
been discarded
- 68 - Big hole = 3 prints - Celluloid
defect -
- 69 - Dent - 29 prints, sounds are weak
 $\frac{3}{8}$ " from feed line - should not have
been discarded

70 = Hole + Dent = 40 Prints - hole 0.20
Sand -

71 = Dent + 3 prints Big Chip $\frac{1}{8} \times \frac{3}{16} - \frac{3}{8}$
from feed line -

72 = Bruiers 13 prints, something
dropped on it.

73 = Dent - 50 prints - small, $\frac{1}{8}$ from feed line

74 = Dent = 217 prints long narrow
dent 0.29 wide, $\frac{3}{8}$ long across
feed line at an angle - clearly a
shove from pull out

75 = Drake = 40 Prints - Dent
with Mould Lock cover

76 = Dent = 79 prints. $\frac{1}{8}$ from feed line.
 $\frac{1}{16}$ dia -

77 = Hole = 3 prints - hole in Cellulose

78 = Bruiers = 116 prints - Dent
probably by mould lock
both machine alike -

79 = Bruiers - 43 prints - 0.25 @ 0.30
Sand particles or metal.

80 = Knocks & Cracks = Record shows
Crackly but moved shouldnt be
descended from Sample 1 reason

81 = (and surface) = 121 prints -
Wrongfully stated should have
reported - Run out & snaps
This would descend from sample
second Bruiers second
would not show Run out &
probably 200 snaps -

82 = Dent = 7 prints fine shov $\frac{1}{4}$ " from feed
0.10 wide $\frac{3}{16}$ long

83 = Bruiers = 38 prints - piece sand or metal forced
in & moved, parallel to music lines

84 = Big Hole = 99 Prints - Puzzle 2 holes sharp
Edge looks as if metal chipped out
no metal displacement -

85 - Roughlet Stand = 3 prints - Think mould
OK - Round out on 2nd print worse than
on 3rd - 1st mould is rough

86 - Rough surface = 122 prints - good
surface, phones not have been
discarded.

End of 7th Aug
45 Discards

8th Aug Discards -

87 - Dent = 95 prints - 030 x 060 $\frac{1}{2}$ from food line

88 - Bubbles - 7 prints - dirt on holder
Clamp fault;

89 - Bubbles = 9 prints - dirt on holder - Clamp fault

90 = Cracks = 25 prints only 1 print rest
bad surface correct

91 = Dent = 194 Prints $\frac{1}{2}$ from food line

92 = Dent = 43 prints $\frac{3}{8}$ "

93 = Dent = 65 prints $\frac{1}{16}$ @ $\frac{3}{32}$ piece $\frac{1}{16}$ from line

94 = Dent = 26 prints $\frac{1}{16}$ wide $\frac{5}{8}$ long
started to in smooth part at angle 25°
to nose - the piece is in the blank -
it was so large it actually cracked blank

95 - Discard for Mottled surface - Bad surface

96 = Dent 48 prints $\frac{1}{2}$ from food

97 = Dent = 38 prints $\frac{3}{16}$ from food line

98 = Dent $\frac{3}{8}$ from food line

99 = Hole = 53 prints - spot 020 dia

100 - Black hole = 3 prints - Defect in plating
dirt or bubble in Copper

101 - Bruise 161 prints, Think it due
to lock pin - 030 long sharp cut

102 - Mottled surface Cracks 184 prints
Bad surface

- 103 - Dent = 81 prints 1" from feed line
- 104 = Bruiis - Clean cut metal cut it -
has a scud; its either pin or lock leaves
- 105 - Dent = 120 prints $\frac{7}{8}$ from feed line
- 106 = Hole too large to repair - 46 print -
 $\frac{3}{8}$ from feed line - Dis -
- 106 $\frac{1}{2}$ Dent = 266 prints = $\frac{5}{8}$ from feed
- 107 Hole = 62 prints = plating defect
- 108 - Dent = 18 print - $\frac{1}{4}$ " from feed line 830 x $\frac{1}{16}$ inch
- 109 - Scrape - 51 prints = long scrape
Very narrow 010 - 1" long
- 110 = Poor Label Cracked & Eccentric =
255 prints - its Cracks + 5 eccentric
Discard
- 111 - Dent = 61 prints $\frac{5}{16}$ from feed
- 112 Dent = 143 print - Silver $\frac{5}{8}$ from
feed line angle 30°

- 113 - Bruiis - 18 prints Sand or metal 018 x 026
Parallel with music
- 114 Dent = 245 prints $\frac{3}{8}$ from feed line 020
- 115 - Dent 54 prints $\frac{1}{8}$ from feed 020 x 060
- 116 - Dent = 27 print $\frac{1}{16}$ from feed 030 round
- 117 Dent = 31 prints - $\frac{7}{8}$ from feed to dia
- 118 = Injury - 83 prints - Sand particles
- 119 = Bruiis - 44 print Tack in blank
- 120 Cracked 148 prints - Bad surf
holder
- 120 Buckel - 40 print - Clancy - dint on Mould
- 122 Bruiis 117 prints long scrapes
Chatter 11/11mm. Think Mould
holder struck Laborn Matrix
- 123 - Dent 101 prints big chip $\frac{1}{8}$ x $\frac{1}{4}$ -
 $\frac{1}{8}$ from feed
- 124 - Porous Spot - 61 prints - Porous
plating defect
- End of Aug 8th Dis
- 39 Discards

Discards on 9th =

125 = Knuckle - 85 prints - This mould should not have been discarded - a duplicate of the line but another number in many times worse + is allowed to run right along

4744-C-7-11 - 126 - 228 prints - $\frac{5}{8}$ from feed to rock Dent.

127 = 2802-B-4-29 - Dent - 5 prints, 2 big dents $\frac{1}{2} \times \frac{1}{2}$ on feed line right angles one to $\frac{1}{2}$ @ $\frac{1}{16}$ dist $\frac{1}{8}$ from feed line - tapered several inches

128 4277-C-7-24 - Surface + Knuckle
170 prints = 5 big rumps but its due to press Condensate sticking to mould
There is Runout quite low but the in the specific blank + he should have tried another blank only 1 sent when I asked for 2

129 = 4721-C-3-5 = 170 prints = Surface + Knuckle
Bad surface - old mould holder
first $\frac{1}{8}$ inch scratched up end. tops arch flat

130 = 4692-C-2-12 - 83 Prints Bruise =
Round dent - Lock pin on Center pin edge

131 = 1285 B 30-37 - 126 Prints Dent
Chip $\frac{1}{16} \times \frac{1}{8}$ - $\frac{1}{2}$ from feed line -
old mould -

132 3655-B-6-61 - Dent, new mould,
99 prints = 020 x $\frac{1}{16}$ to from feed

133 = 4311-C-2-64 = New Mould, 53 Prints
Shore radial 020 $\frac{3}{16}$ long at feed line -

134 = 4173-A-33 - old mould - 109 prints
Shore - 020 $\frac{3}{16}$ long $\frac{1}{4}$ from feed line -

135 4745-C-4-20, old Mould - 44 Prints
2 dents $\frac{3}{8}$ from feed line - $\frac{1}{2} \times \frac{1}{2}$ the other
030 round

136 = 4374-A-1-83 - old Mould: 93 Prints
tried to repair - it very small
should not have been discarded
hardly noticeable dozens of moulds
running have as bad,

137 = 4037-C-2-64 inside old / new on new side
where Dented 2 pieces of repair
to front side to die about.

138 = 4154-A-1-34 = new mould side -
Dent new mould side - by a plant in support
to wide 5/8 long 3/5 1 of 1/32 to front side

139 = 4402-C-4-48 = new mould Dent 20 prints
Shoe 010 - 1/4 long radial - 3/4 front side line -

140 = 4460-H-2-58 = old mould - 159 prints
Bad -

141 = 2352-C-1-9 = Dent = new mould -
123 Prints, Shoe 3/4 long to die - nearly
radial 1/2 from side line - End of 9/10

Aug 10. Discard -

142 = 4325-C-3-59 = 99 prints to Dent
new mould 3/4 from side 1/2 x 1/2

143 = 4106-C-8 = Dent = 205 prints - new mould
Shoe - radial - 1/4 from side 020 x 3/8 long

144 = 4402-C-4-51 = Dent new mould -
15 prints - 1/6 from side parallel shoe
020 - 1/2 long

145 = 2785-B-3-30. 44 Prints, old mould Dent
Shoe 1/4 long 020 - radial 1/6 from side

146 = 4745-C-4-7 Bubbles in repair -
new mould - hardly hear it should not
be discarded.

147 = 4382-A-1-7 = Dent 33 prints
new mould. 1/4 round on side line -

148 = 4460-H-7-1 = Dent - old mould -
3/4 from side line - 040 round = 54 prints -

149 = 4460-H-7-2 = Bruise - new mould -
38 prints - grit probably - 1/2 from side 020

150 = 4129-C-7-51 = Steel in blank reported -
96 print = 020 near label -

151 = 4326-C-3-61 = 5 prints - should not be
discarded. Injury was on bridge
walk not in back of Diamond shoe
injury -

152 = 4685-C-41 = 142 prints Dent -
new mould -
Chip 1/2 x 1/2 - 3/4 from side

158 = 4588-C-4-180-86 pounds Dent
new mould = 5 lbs. $\frac{3}{8}$ long 220 $\frac{3}{8}$ from
feed line -

154 = 4168-C-3-327-77 pounds -
pressed on a metal piece with radius
pressed down -

155 = 3894-C-3-15 = Buckle,
dent on mould holder - Clancy's fault,

156 = 3894-C-3-16 = Dent - not on
1st or 2nd print - (New mould) etc on
3rd print - $\frac{1}{4}$ " from feed - $\frac{1}{4}$ " long to ends -

157 = 4367-A-7-18 = Dent = new mould ring
3 prints - $\frac{1}{2}$ from feed $\frac{3}{32} \times \frac{1}{32}$
right work \downarrow

158 = 4154-A-1-30 = Dent old mould - 174 print -
 $230 \times \frac{1}{8}$ at feed line -

160 2951-G-1-22 = Dent = Builed 16 -
015 round - $\frac{1}{8}$ feed line -

161 = 3555-C-4-22 = Dent = 142 printed -
new mould ring - 020 round to feed line -

162 = 4382-A-1-21 = Dent 101 prints - old moulding
 $\frac{1}{16}$ wide $\frac{3}{16}$ long at feed line -

163 = 4553-B-8-7 = Bruce = 22 prints -
Think true mould scraped across other -
forgot blank -

164 = 4326-C-3-82 = Dent - new ring 63 prints
big piece forced in blank $1\frac{1}{4}$ " from feed
 $\frac{3}{32}$ wide $\frac{1}{4}$ " long

165 = 3307-C-3-17 = Dent, new ring - 98 prints
on feed line - 015 round -

166 = 4158-B-40 = Knock & Crackle 120 prints
rightly done & ended

167 = 4015-C-67 = new ring - 22 prints -
010 \times 052 - $\frac{1}{8}$ from feed -

168 = 4494-A-5-70 = Dent, new ring - 16 prints
 $\frac{1}{2}$ from feed line - $015 \times \frac{1}{8}$ "

169 = 2115-A-2-73 = 78 prints - new ring
dent on holder - Bunching heads
probably -

170 = 3911-C-9-8-88 prints, old ring Dent
2 dents 7" apart both $\frac{1}{2}$ " from face
one $\frac{1}{4}$ " long other $\frac{1}{2}$ " long

171 = 3117-C-9-93. Dent - 222 prints old ring
 $\frac{5}{16}$ " long & wide nearly radial - upper end
 $\frac{1}{4}$ " from face =

172 = 4481-B-33 - Dent - 124 prints - new ring
 $\frac{1}{4}$ " long - $\frac{1}{4}$ " from face - 040

173 = 4477-C-3-117 - Dent 43 prints new ring
silver 015 - $\frac{3}{16}$ " long $\frac{1}{2}$ " in diam. $\frac{1}{2}$ " in diam.

174 = .2586-A-1-19 - Hole on Marquin
9 prints - looks like Mercury or lead
forced in

175 = 3280-B-2-35 - Brinise - 136 prints
cutting wheel cut curved to =

End of 18th day 33 Discards

7th 8 9th + 10 - how
Dents 68
Brinise 17
Surface 10
should not be discarded 10
Due to Tolant 4
Hole 4
Scrape 2
porosity not 7
to check

128

Discards 11th day

176 - injury - 3 prints = sand, 020 - new ring
piece white grit $\frac{1}{2}$ " $\frac{3}{16}$ " square -

177 - Dent - 101 prints new ring - $\frac{1}{2}$ " $\frac{1}{32}$ " to face

178 = Cracks - 97 prints Due to very bad
Mottly shorts new have been put on

179 = Dent = 17 prints - new ring - $\frac{1}{2}$ " $\frac{1}{32}$ "
on face line -

180 = Brinise - 393 prints - 4174-B-14
done by metal in blank $\frac{1}{2}$ " square - outside of it

181 = brought to repair - 237 prints - repeats -
Blowed full scrapes also a rather surface
Kept on band too long,

182 - Cracks - 180 prints - some end scrapes
in record - bad start, but general surface
fair to good - The more we wash
the the smoother it gets

183 = Dent - 27 prints - $\frac{1}{4}$ " from face 020 x $\frac{1}{2}$ "

184 Metal in blank - 61 prints -
Its a tack -

128

185 = Porous Spot - 150 prints -
Something in blank did this -
or a drop of Cyanide - at another place
grit made injury - or bruise - surface OK

186 Dent = 66 prints - angle 40° chop. to
 $\frac{3}{16}$ long at feed line

187 = Mottled Surface - 56 prints - Horrible surface

188 Bruise - 59 prints - Metal pressed dent
in mould - Metal didn't move - 020

189 = Dent - $\frac{1}{2} \times .032$ angle - at feed new ring 78 prints

190 Scratch = 237 prints - should not
be discarded for the scratch near
label as it is far away from the
mould (C)

191 - Bruise - 107 prints - Radius
bruise - done by men with some
metals - not fine to blank -

192 = Mottled Surface - 187 Prints -
This is not what is called a mottled
surface at all - Run Out has got in mould
from sand grain & injury

193 = Scraps 192 prints -
Dont sound - Discarded for
appearance, they should have said so

194 = Mottled Surface = 107 prints
Why reject for mottled surface after
107 prints - its a little mottled -
ask if Condensite, There is a big
Run Out & a horrible crackly
surface why 107 prints before
rejection 4721-C-3-30 -
got other from Boardman

195 = Porous Spot - 97 prints OK
Real porous spot developed
from use - its in plating &
tried to repair but got worse

196 = Knock & Brackets - 65 prints -
after cleaning twice 75% of
surface disappeared 3rd cleaning
showed few second -
2 or 3 severe scrapes at
start could have been
repaired - Condensite steel
on mould - small dent &
small injury - 1st 18 lines scratched

197 = Dent = 4 prints - $\frac{1}{16}$ dia $\frac{1}{8}$ from face line

198 = Dent - Cracks & Knocks 96 Prints -
Dent $3/8 \times \frac{1}{16}$ $\frac{1}{4}$ off face line -

199 = Hollow in Repair spot = 107 prints.
small - - Discard =

~~23~~ Day + night discard of 11th Aug
235

Aug 6/16
Examination of Discarded Moulds

- 1 = Plating dirt on catholoid
- 2 Big piece blank & dented mould
- 3 Pin dropped on mould also scratches.
- 4 Deep sharp dent copper (in flow) done by hard metal chip
- 5 Dent due to chip. near feed line
- 6 Dent, a chip Varminished spot
- 7 Dent
- 8 Crackly surface 3 points - Condensate probably in it
- 9 Dent $\frac{3}{8}$ from feed line - bridge with scored by chip moving off flow
- 10 Dent $\frac{3}{8}$ from feed line
- 11 Dent. $\frac{3}{8}$ " also scratch
- 12 Dent. $\frac{3}{8}$ " 3 point chip
- 13 Hole $\frac{3}{8}$ from feed, sharp 2 edge looks like bubble in plating
- 14 Mechanical injury in flow, looks like piece of grit forced in Matrix. A flow, longer than wide has small dent in another part of matrix.
- 15 $\frac{3}{4}$ from feed line. piece sand forced in Copper
- 16 $\frac{3}{8}$ from feed long chip $\frac{1}{8} \times .032$ forced into, second found second no var on chip pressing in chip forced across var to, sides of chip made it more shiny. Needle drawn over cuts chip but not second - Dented Matrix.

17 = Report says Rough Crackly - really OK only a Run Out


18 Porous Spot marked - Matrix shows some injury except little rough spot which caused pull out in Record - Put it back with request Spot to be burnished so as to prevent pull out

19 = Marked Rough Crackly - No so - good. Mould should never have been damaged

20 - Bruise caused by piece sand .016 dia.

21 = Marked Crackly - 154 points to good mould yet & should be put back lots of moulds now running are much worse

22 Dents in mould 2 places $\frac{3}{4}$ " apart Chip on blank or between blank

23 - Mechanical injury  this chips - Symmetrical & sharp

24 = 146 Records = pulled off too soon
only 2 light snaps noticeable & could
be repaired. The others not strong

25 = Reported Rough Cracks - Not so - good model
2 Snaps due to picker elements sticking
to mould, this ventrix was never examined
& if chips removed is OK

26 Repld Rough Cracks - It's a fine
model, not rough or any cracks
noticeable - should be put back

27 = Reported Surface Cracks - Surface
good - one group of snaps which
can be repaired & mould put back

28 = Repld Surface & Knocks - Surface
good, only pair of knocks in
broad & not on mould -
should be put back

29 = Repld Scratches & Cracks - Only
2 Cracks in a repair spot
Scratches don't go in should not
have been discarded 156 Records -
Chip pressed in middle of mould

30 = Repld Cracks - No Cracks - just
a very light run out 146 records
should not have been discarded

31 = Repld Hard substance in blank -
Couldnt find it - properly discarded

32 = Repld 3 dents - There are 5 in a group
very small - $\frac{1}{4}$ to $\frac{3}{8}$ from feed line
018 each, only give light dull
knicks - old records even if
weaker, record it could have
been repaired & put back

33 = Repld Dent = Dent sounds very
weak & could hardly hear it
should go back on board again

34 = Repld Dent = Cant say if it can be
repaired - $\frac{1}{8}$ " from feed line

35 = Repld Rough Surface = Has run out
due to gouging sub machine
wrong - Rightfully discarded

36 = Reptel Rough Surface - 1st print has slight Run Out 3rd print absolutely OK.

37 = Reported Buckle = Assembler left lot pieces in - Claneys fault.

38 = Reptel Hents - Discard - OK

39 = Reptel Dent from Chip = OK = Big chip in second, chip angle of 30° to wide $\frac{1}{4}$ " long $\frac{1}{8}$ " from feed line

40 = Reptel Dent in suspension opat, Discard) OK - $\frac{3}{16}$ " from feed line $\frac{3}{32}$ " Dia round

41 = Reptel Dent = $\frac{1}{4}$ " from feed line 0.20 wide $\frac{3}{8}$ " long slight angle from parallel The defect is too weak to discard mould =

42 = Discarded for 2 black holes - holes in mould filled with Condensate sticking up felt with finger - Discarded OK

43 = Reptel Buckles - Dirt on holder Claneys fault.

44 = Reptel buckles Dirt on holder Claneys fault but sound too weak to warrant discard - 4 pks

45 = Reptel Deep holes 72 prints - Discarded OK

46 = Nothing on Card - Hole produced by piece sand 0.20 -

47 = Reptel traces = Middle of minor 0.28 dia. Flakily Dis

48 = Reptel Cracks 133 pks = Chip in second $\frac{1}{8}$ " from feed line should have been discarded for Dent mould has crackly surface

See back

11 pages

Examination of density as shown by mass on balance

- 1 Fibre bag
- 2 Water spot
- 3 "
- 5 Red wet spot
- 6 Graphite wet black
- 7 Wad of pure graphite
- 8 Water spot
- 9 Portland Cement
- 10 Water spot
- 11 "
- 12 Fibre from bag

Moulds not required

Girls employed Disc Dept
214 mostly 15° some 17½

Varnish	59
Oil tanks	6
Painting	1
Sorting boards	5
Eye Inspect	8
Machine test	6
Edge Inspect	4
Model test	9
Numbering, Sorting	11
Final Wash - Inspect	60
PB Inspect	6
Machin	3
Office	5
	<hr/> 183

Mould Repair room	21
Cellulose paint	5
" Dip	4
Clerk	<hr/> 31

	Discard	Many	Record full house
	Keats	Cricket	
July 25	35	41	105
26	38	27	87
27	43	19	100
28	60	23	90
29	56	29	83
31	17	23	101
Aug 1	78	49	82
2	37	47	99

Inspector Reports

	Comp	Perfect	Ven Pullout	Rounds	NewM Rec	NewM Bad	NewM % - %
July							
19	92	66.9	15%	20	20	none	
20	88	63.2	17	20	50	"	
21	93.9	66.8	14	50	75	"	
22	93.3	56.6	20	40	70	1	
24	89.57	55.3	37.5	60	102	2	
25	90.27	59.2	34.5	60	104	1	
26	86.8	48.7	39.1	60	105	4	
27	92.6	58.6	34.3	60	127	6	
28	93.4	59.5	33.6	60	145	3	
29	94.6	56.3	26.5	55	111	0	
31	93.1	56.7	34.5	60	132	0	18%
Aug 1	90.	70.67	23.19	60	242	1	33%
2	93.6	70.5	22	60	201	2	27%
3	89.9	58.2	30	60	146	7	22%
4	90.8	50.5	30	60	183	4	25.7
5	91.36	57.74	30	51	193	1	31%
7	93.4	62.6	28	60	236	2	
8	92.5	46.1	46	60	281	11	39%
9	91	67.6	26	60	337	5	46
10	92	56	30	60	322	6	44
11	93.6	48.6	40	60	365	5	50
12	94.1	46.1	44	60	297	5	40
14	93.9	51	40	60	374	2 2.25 Ven 6 Cur -	50%
15	95	49	45	40	281	2 2.25 Ven	50
16	91.6	41	30%		115	00	24%
17	91	53.5	30		225	1 Ven 10in	47

Drop test.

July 11	12-6-9-4-8-6	46
12	20-4-6-5-10-20	60
13	2-8-17-2-13-13	55
14	15-5-5-8-1-9	43
15	2-20-20-8-2-20	72
17	20-10-20-1-20-19	90
18	9-18-3-20-12-1	63
19	12-7-19-20-2-10	70
21	20-3-1-9-13-7	53

22		
23		
24	8-14-20-2-5-20	69
25	20-3-12-20-4-9	68
26	10-11-9-5-7-20	62
27	20-15-8-3-20-20	86
29	18-7-20-10-3-20	78

Aug 1	20-20-2-11-18-20	94X	x Specimen of new mixed wood
2	13-3-3-5-3-7-	34	
3	9-2-7-2-20-6-	46	
4	16-7-2-19-20-18	82	
5	20-20-20-20-3-3-	86	
7	18-20-7-20-13-20-	99	
8	10-18-3-1-20-16-	68	
9	3-7-18-20-13-9-	70	
10	7-19-20-20-20-13-	99	
11	18-3-20-10-9-16-	76	
12	20-10-9-3-19-16-	77	
14	12-20-20-7-18-16-	93	

Blanks made

July

19 15371
20 14747
21
22
23
24 9378
25 12755
26 14350
27 14659
28 16473
29 14691
31 12612

Aug

1 16245
2 16296
3 17343
4 17635
6 15256
7 16209
8 18039
9 14248
10
11
12
13
14
15
16
17 18174
18 19220

19th

21 - 9107
22 13390
23 13706
24 13146
25 10254
26 11312
28 7822
29 15602
30 17066
31 17594
31 17741

Sept

1 15126
2 Shut down Saturday
3 15626
4 16514
5 17183
6 13076
7 7914
8 18314
9 19478
10
11
12

Record to Baldwin

June 20	7651	July 22	5427	21 st 8153 - Nov 6
21	5571	24	5089	22 9391
22	6247	26	5587	23 10772
23	3968	27	3899	24 11054
24	5230	28	5256	25 12097
26	7166	29	5236	26 11075
27	8838	31	4481	28 11442
28	8465	1	5978	29 10785
29	9638	2	6117	30 13334
30	10169	3	6161	31 10807
July 1	9285	4		8/11 11822 ✓
3	9562	5		2 9548 ✓
5	9101	7	5579	5 13057 ✓
6	9055	8	6247	6 10746 ✓
7	9133	9	7125	7 13395 ✓
8	7105	10	8089	8 10642 ✓
10	9031	11	9287	9 10041 ✓
11	6066	12	8126	4 10605 ✓
12	7149	14	9309	12 13128 ✓
13	6137	15	10065	13 11994 ✓
14	7639	16	10071	
15	5080	17	10075	
17	7006	18	8681	
18	4132	19	10696	
19	5127			
20	5138			
21	2797			

Navy Mould holes
seed by Clancy

old rings turned down
so can use without lead

July 1- 8
3 5
5 14
6 10
7 14
8 10
11 12
12 13
14 9
15 26
20 15
21 14
22 14
23 24
26 23
27 19
28 11
29
31

Reese 18 book

Aug 1 24 Total
2 51 263
3 43 314
4 41
5 26
7 33
8 50
9 42
10 38
11 51
12 21
14 43

Clancy any 344 rings have four more
387 31%
438 34%
454
487 38.8%
537 43%
578 46%
617 50%
668 53.4%
689 55.2%
732 44

10811 80520 (744 8848
75677 936
48484 53088
43244 26544
5186 79632
82819 28
10811 -

8281
229
8052

5156
3683
9
8848

34
540
136
106 5579
1736 85
1836 617

18360
1930
91500
128100
137250

277
579
854

Aug 2/16
Blank Schedule

5 min Contact
3 " 600 lbs
8 " 600 lbs

[ITEM(S) FOUND IN BOOK]

June 19, 1916
Mr. Edison,

Sir,

Would you be disposed
to give me an increase in my
salary. At any age and with my
experience I feel that I ought to be
earning more than I at present
receive. Perhaps, when you take into
consideration the fact that I have been
in your employ five years you will
not think this an unreasonable
request, and be inclined to grant it.
I need not say that in any case,
while I remain with you, my
best energies will continue to be as
they have hitherto been, devoted to
your interests.

I remain
Yours faithfully
J. Miller

[ITEM(S) FOUND IN BOOK]

The Edison I laid out
Power diff. style Automatic Warrishing
Machines the last is very simple
and will not cost much to make
up using all the parts of Hand
Warrishing Machines, One Pair
can turn out 2,100 in ten hours
easy, I think 7 of these Machines
will give an output of 15,000 dish

June 26, 1916

J. P. H.

[ITEM(S) FOUND IN BOOK]

Mr. Ellison

[ITEM(S) FOUND IN BOOK]

September 12th, *1916.

Mr. T. A. Eason,

13128 - #1522 Brushed Blanks delivered to stock.

Rejected - New Process

Spots	11
Scratched	51
Cracked Edge	1
Chipped Edge	21
Poor Print	2
Bad Centers	3
Cracked Centers	1
Wrong Combination	7

97 Total.

GHB/ASD.

C.H. Baldwin

[ITEM(S) FOUND IN BOOK]

September 13th, 1916.

Mr. T. A. Edison:-

11994 - #1522 Brushed Blanks delivered to stock.

Rejected - New Process

Spots	12
Scratched	32
Dents	1
Chipped Edge	4
Pin Holes	1
Bad Centers	7
Cracked Centers	1
Wrong Combination	1
Fear Print	2
	<u>61 Total</u>

G.H. Baldwin

GHB/AMO.

**Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 18
Notebook, N-16-08-12**

This notebook was used by Edison during August-September 1916 for notes on experiments to improve the surface quality and the durability of Edison disc records. There are also notes by William W. Dinwiddle, Archie D. Hoffman, and other experimenters, possibly including Joe Miller and Sherwood T. (Sam) Moore. The entries at the beginning of the book include a list, continued from Book No. 17, of flaws observed in discarded record molds numbered 200-352. Other notes describe a sequence of experiments numbered 1262E through 1307E. Included are tests involving different varnish compounds, variations in the methods of applying the varnish and in the amount of heat and pressure during baking. Also included are entries involving experimental lots of records made with differently constructed or "loaded" record blanks. Flaws and successful results are both noted. At the end of the book is a summary of inspectors' reports, along with notes on labor costs and piece rates and lists of mold "holders." Some notes are in the form of instructions to Hoffman or Dinwiddle. Inserted into the book are several loose notes by Dinwiddle, including descriptions of experiments 1444E-1466E. The front and back covers are labeled "18." The pages are unnumbered. Approximately 150 pages have been used.

Rejected Discarded Moulds
reason for discard.

Aug 12th
Night & Day -

200 = Scratched Label = 27 prints =
Bad -

201 = Scratched Label 10 prints - Bad

202 Scratched Label 10 prints
Should not have been rejected,

203 Stain - 296 Prints = Should not have
been rejected = 2 Snaps are in one due
to injury to mould but loudst is
piece of Condensate stick on
both repairable -

204 Dent - 59 prints New ring 3 dents
~~Resin~~ Resin powder - at feed line -

205 Dent - 34 Records - Tiffed lens

015 X 030 -

206 - Bruise - 228 Prints - Bad - Miller says
its done putting in the truck =

207 - Mottled Surface - 86 Prints - its a different
working Mould than the other -
Must be bad sub-master -
Why 86 prints before descending
Hap very bad Run out after
start =

208 - Bruise - 114 Prints - Bad
Cant say what caused it -

209 = 2 long scratches - 320 - bad

210 = Big Hole - 66 prints - hole 0.65 dia
in track - deep - Cant be repaired
Bad

211 = Feather stain = 194 prints -
Bad - shows feather in Record
Nothing on mould

212 = Duckbill Holder = 145 prints -
pin dropped from holder above in run
man didnt see it + pressed it in

213 = Brunes = 173 Prints - (Bad)
Matte bruno Cant say what caused it

214 - Porous Spot = 145 prints =
To probably a low spot (there is
scuffs of it there & it looks ok
but sounds loud -

14 only End of Aug 12th Mould Dis.

Aug. 14 Discard Moulds

215 = Mottled Surface = 633 prints,
Evidently got mottled by use shoes
diminished - it has ripples
PHENOMENON = The lines are zig zag
hard second

216 = Mottled Surface 548 Prints
Very bad surface - loud second
should have been discarded long
before - Think should limit to 3rd
• Smooth part next table shows
hundreds of small dents beside
Matte -

217 = Dent = 60 prints old mould - 015 round near fin

218 = Dent, 156 prints - old + new ring on new side

219 = Dent = 100 prints, old ring - $\frac{1}{16}$ " off (52)
020 X 060 -

220 = Dent - 201 prints, new ring = 2 dents
 $\frac{1}{4}$ " feed line - small

221 = Dent = 122 Prints = old ring 010 X 060 at feed

222 = Dent = 90 Prints - old ring = 2 sides $\frac{1}{4}$ " side
to den at feed

223 = Dent = 41 Prints, new ring to $\frac{1}{8}$ " from feed

224 = Brinise - 78 Prints = new ring

225 = Dent, 67 Prints, new ring $\frac{1}{16}$ - $\frac{1}{8}$ " off feed

226 = Stain = 83 prints - Record looks
Very bad =

227 = Brinise = 113 prints = old mould
Dust. Clearer = wrong - new man
probably

228 = Dent = 15 Prints = old ring =
015 round dent $\frac{1}{4}$ " feed line -

229 = Prints - 153 prints old ring -
grit 025 -

230 = Dent = 267 Prints new ring -
Silver 020 $\frac{3}{8}$ " long across feed line -

231 = Dent = 136 Prints - old ring - $\frac{1}{2}$ dia
 $\frac{1}{4}$ " from feed line -

232 = Dent = 83 Prints - new ring -
2 dents $\frac{1}{2}$ " apart, Silver $\frac{1}{4}$ " to dia -
near feed

233 = Dent = 148 Prints new ring Silver
015 @ $\frac{1}{2}$ " long near feed -

234 = Prints - 61 prints - new ring -
possibly grit -

235 = Dent = 134 Prints new ring
Silver 030 $\frac{3}{8}$ " long $\frac{1}{4}$ " off feed

236 = Dent = 91 Prints = New ring =
1" from feed 015 x 4

237 Dent = 150 Prints - Old ring =
Stain 020 by 3/8 long stain at feed

238 = Scrape = 117 Prints = New ring
bad

239 = Dent = 406 Prints New ring -
Surface fair =

240 = Bruise = 4 prints = its a
Scrape =

241 = Dent = 191 Prints = new ring 1/2"
from feed 032 1/4" long

242 = Dent = 43 Prints - New Round
at feed 1/2 dia

243 = Dent = 108 prints, old ring
shouldnt been discarded

244 = for sound in round - carbon acet
188 prints = should have been
discarded for run out (big x bad)
surface - probably very soft Copper
1/2" long all charred out (115)

34 Discards 14th Aug

Matted	2
Dent	22
Brown	5
Stain	1
Scrape	2
Worn out	2
Buckle	1
	<hr/> 35

22, Dent 13 Miscellaneous

245 = Discarded for sound in mound worn out
The opposite side of 244 =
its OK mound. Not have
been discarded 188 prints
same as 244 -

246 = Dent 143 Prints - all matted
very small dent near feed -

247 = Scrape 171 Prints = new ring -

248 = Dent - 36 Prints. Old ring -
020 x $\frac{1}{2}$ at feed line -

249 = Buckles = 112 Prints = no sign of
dent on opposite side

34 Discards -

OK		OK
OK	X	OK
OK		OK
OK		OK
OK		OK
OK		OK
OK		OK
OK		OK
OK		OK
OK		OK
OK		OK
OK	X	OK
OK	X	OK
OK		OK
OK		OK
OK	X	OK

75%

33%

58%

16%

75%

05%

not tested

1262 E

Use 1261 E new soft blank.
2 brushfull Varnish

Print 4 Rounds on following

Print Reg. Exclat 750 lbs
for 12 minutes

All Printed full & OK new low
good Edges scarcely any
spurt out between moulds

Mix wrong - or mistake
made somewhere

Moulds dirty

1263E

Dup 1262E

Except 700 lbs premium

[illegible]

OK OK	X	OK OK	
OK OK		OK OK	
OK OK		OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	
OK OK		OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
83%		45	
41%		41%	

1266 F

Make 2 Rounds Duplicate
of 1261.

Watch Press man to see
he puts on the 600 lbs
Cold + then puts steam
on 6 min Cool 10 min

2 brushfulls Vase &
use square Edged wheels

Trouble is the powder
worse we have had in
3 weeks —

1267E

OK	X	OK
OK		OK
OK	X	
OK		OK
OK	X	OK
OK		OK X
OK		OK
OK		
OK		OK X
OK		OK X
OK		OK X
		OK

91%

83%

25%

33%

1267E

Aug 16

Fresh powder right from the
Magnet. 2 Rounds

Schedule - Bring to 600 lbs
Cold - then put on steam
for 6 minutes, Cool 10 min -

Run regular on Printing
Send to Edison

Read prints 12 noon 17 / Aug 16

The powder is really bad
4th test =

Theory all residual Alcohol gone & the
bottle - too old = waste remnants of Alcohol
to prevent crystallization -

C93

Discarded Moulds 15th Aug

250 = Scrape - 96 Prints - old ring - Bad Scrape

251 = Ring Hole - 105 Prints = sorry

41758-24
252 = Mottled surface = Crystalline Copper impurity
104 Prints - Very bad surface awful -
should have been caught before it got
so bad - This is a serious thing:
Run out horrible

253 = Substance in Blank - 40 Prints
Red pithy = it leached mottled although
soft - Strange = $\frac{1}{8}$ off at feed line

254 = Dent - 64 Prints - 0.30 X 0.80
at feed line -

255 = Mottled surface 129 prints
Horrible surface horrible
Run Out. 4342-A-1-95 =

256 = Dent = 44 Prints =

257 = Mottled surface 90 Prints
4402-C-4-24 - This is not
perceptibly mottled but has horrible
run out due probably to unstable slabs
back to badly mottled + crystalline

got 12 of 262 from Baldwin on
14th all good surfaces -

258 = Dent - 421 Prints - to new feed
new ring made

259 = Dent - 129 Prints new ring
032 x $\frac{1}{4}$ " long across feedline -

260 = Mottled surface = 181 prints
Rotten surface should have been
taken off earlier = 4402-C-4-24

261 = Dent = 164 Prints = 03 x $\frac{1}{8}$ " at feedline.

262 = Mottled surface 220 prints =
Horrible surface 4745-C-4-12

263 = Mottled surface = 107 prints -
Bad horrible surface -
3083-C-3-13 -

264 = Dent - 22 prints - $\frac{1}{16}$ - $\frac{1}{2}$ in old ring

265 = Dent - 67 prints new ring -
Silver $\frac{1}{4}$ near feed

266 = Dent - 67 prints, $\frac{1}{2}$ dia - recoring

267 = Scrapie = 132 prints - Ivory
of C. claus, clipped -

268 = Rough surface - 232 prints -
not very bad - but OK to Cut out.

269 = Rough surface - 232 prints,
not very bad - OK to Cut out,

270 = Bruise - 177 prints = grit -

271 = Marqui - 151 prints = old ring
it's a big Dent in smooth & on
feed line -

272 = Mottled surface - 4378-c-5-69
Pretty fair not bad,

273 = Dent - 63 prints, recoring
 $032 \times \frac{1}{4}$ middle music -

274 = Mottled surface - 73 prints
3080-c-4-48
Bad at End mottled set a spot
making Run out

275 = Dent = 130 prints - New ring
Shov 030 by $3/4$ " long

276 = Brunei - 203 prints -
looks like base in plating - round
+ Crystalline all over -

277 = Rough Surface = 167 prints
OK rough - Mottled by press.

278 = Rough Surface - Press Mottled,
Mottled by press = 167 prints

279 = Dent - 138 prints - 2 slivers
+ apart $3/4$ " long middle none
New ring

280 = Brunei = 136 prints - Scrap -

281 = Mottled Surface = 143 prints
Bnd = Mottled on back

282 = Dent 156 = prints New ring
Shov 032 $1/4$ " long for 1 cm. +

Aug 15

Dents	12
Scrape	2
Brace	3
Hole	1
Milled by Press	9
Roughsharpen	4
Buckle	1
Substance in blanks	1
	<hr/>
	33 Discards -

12 Dents 12 Miscellaneous -
9 worn out

283 = Buckle = 69 parts -
Chop of Vase eye holder
33 Discards -

Orders Aug 17/16

Hoffman -

Only keep 150 bags of
unground powder ahead of
moulders & 130 bags of
ground stuff ahead of
presses & Equal to 50
bags ahead of the Moulders
Edson

On 16th when blanks started come back
Estimated on hand

40 000 lbs finished powder
40 000 " ready to grind
80 000 -

Blanks ready for Varnish	2 800
" Varnished	13 000
" Edged	21 500
" Varnished on 2nd floor	3 500
" New front Hoffman	1 900
127 000 blanks -	<u>42 700</u>

1269E

OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK		OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		OK OK	
OK OK		OK OK	
OK OK		OK OK	
OK OK	X	OK OK	X

41%
66%

83
66%

Drop leads

5-14-9-20-2-20

1269E

2 Rounds of 1261 blanks
600 lbs Cold then steam for 6
min - Cool 10 min

Print on following schedule
~~1261~~ put at contact needs
off pin - When temperature
reaches 225 deg Fahr
put on 750 lbs pressure &
hold for 12 min Cool
Cold -

Send to Edison

The 17th Aug powder is
really bad

OK OK		OK OK	
OK OK	X	OK OK	
OK OK		OK OK	—
OK OK	—	OK OK	
OK OK	X	OK OK	—
OK OK		OK OK	—
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	—	OK OK	—
OK OK	X	OK OK	
OK OK	X	OK OK	—
OK OK	—	OK OK	—

91%
50%

100%
8%

1270 E

Take fresh powder from Dryers
put in Cans - When Cool
Enough Run thru Crushers +
Screens + take several
rounds right away - make
blanks.

1261 Schedule - ← ||||

To have 2. Brushfield Varnish

Print 4 Rounds

Powder still bad -
probable trouble is
Oxidation of Kac

$1\frac{1}{10}$ Lac pounds

OK OK		OK OK	X	OK OK	
OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X
OK OK	X	OK OK	X	OK OK	X
OK OK		OK OK	X	OK OK	11111
OK OK	X	OK OK		OK OK	Ysm
OK OK	X	OK OK		OK OK	11111
OK OK	X	OK OK		OK OK	
OK OK		OK OK		OK OK	X
OK OK	X	OK OK	X	OK OK	11111
OK OK		OK OK	X	OK OK	
OK OK		OK OK	X	OK OK	
OK OK		OK OK	X	OK OK	X

41 3/2

1271 白

Make up Vac Dryer full of

Priz 4-3-1.10 lac-

When done put in cans with top on - When cool enough

Grand ^{Coast} Series & make up
into blanks at once

Have 1/2 of all the blanks
run on 1261 schedule +
1/2 regular schedule -

Send up stairs to Kiercher
to Yarnuch with 2 Groushfull
~~the~~ 1261 blanks + Reg Var
The Reg blanks —

Print all - but save
4 rounds Each 1261 +
Req + send to 2 down

Schedule 4. 2. 6. 1954
Made at same time as Reg on other
side $\frac{1}{10}$ Lac 1954

83%
50%

Systematik

Incan Moulds Night & Day
16th Aug -

284 = Worn Out - 394 prints descended by
orders - 300 maximum times -
Very good surface, could have been
run longer but 300 prints is enough
shows 003 crystalline on back but pretty good
surface on back

285 Worn out - opposite side of 284 -
This is better surface than the other
few snaps at about not bad - balance
surface VV - 300 at limit is
safe if not mottled on back -
Crystalline on back even 002

286 = Formica = 154 Prints - grit in between

287 Dent = 217 prints - very many
silver $\frac{1}{2}$ long at head - Mottled on
back 003 & larger about middle zone

288 = Cracked = 117 Prints - rather mottled
on back - 011 =

289 = Mottled - 190 Prints -

Very Mottled (big) on back of
Mould - Bad Run Out -

290 = Bruce = 263 prints -

Back fine grain -

Cause of injury Mould holder
dropped on it big injury

291 = Buckle = 95 prints -

fine grain back - Thin - VV surface -

292 Bruce - 80 prints - Edge of

mould holder struck it Mottled
some & very dirty on back.

293 = Mottled surface = 152 prints

Bad Mottle on back. 005 @ 005 -

Bad run out -

294 = Dent, = 34 prints - old run

Very good back - Otl =

295 = Dent = 84 prints -

good back = Otl -

296 = Porous Spot = III Prints =
Don't think should be enclosed
~~not~~

297 =

See further on

Notes on Temperature of
Blank Powder

Mill down 2 hours to cool -
after starting up temp of
powder taken at discharge
tube from grinder 130° fahr

When Mill is hot temp 168° fahr

Temp powder after passing thru
Conveyor & Elevator 110° fahr
from Cold Mill &

128° f from Hot Mill -

Cottleville

1272 E

1272 E Cold powder
4 Rounds -

Two brushfills -

Print deep send to
Edison Rush

298 = Mottled Surface 117 Points
mottled 003 on back as you approach
label - Wrong designation -
Should be numerous snaps &
bad run out starting a little
ways in -

299 Rough = 214 Points on back
fair but middle more rough
003 - Wrong designation
Surface is OK for this kind of
second or only one snap
that needs repair near
End - The etch is little
rough, but 1 or 2 snaps
could have been deeper

300 = Mottled Surface = 172 Pls
back a little mottled fine spots some
dirt - Bad run out -

301 = Mottled Surface - 259 = Prints -
On back pretty general mottled oos
Some run out showing surface
Some dull knobs 16 lines.

302 Rough Surface & Scraps =
Smooth back - 246 prints -
Should not have been discarded

303 = Cracked - 285 prints back not
mottled = Caro Nomi = its little too
rough surface for high class
scrap - Quick Opals.

304 = Mottled - 258 prints Back is
very strong mottled oos
Rough general surface.
" " due to oos mottled

305 = Mottled surface 193 prints, back pretty
good - general surface as rather
low

306 = Mottled - 83 = Somewhat mottled
on back - oos - Run out bar -
Weak Violin

307 = Mottled = 97 = Prints - back is
Mottled - looks like checks & one bad
Bad Run out -

308 = Rough + Crackle = 168 Prints
somewhat mottled on back -
might have done 10 or 20 more -
not very bad -

309 Mottled surface = 142 pts - smooth
back - Run Out in SeaMaster
This is 2nd one - not fired Dueschle

310 = Dent - 95 pts - new ring

311 = Dent 173 " "

312 Bounce 190 - something dropped on head

313 " 166 - grit

314 Dent 102 new ring

315 Dent 307 old ring

316 Grate 353 Dously cleaning Tool

317 Dent 58 new ring

318 Dent 187

319 Bounce 104 grit

320 Dent 195 new ring

321 Bounce 136 done by sharp Tool

16th -

Dents
Bruise
Surface
Buckle
Porous spot
scrape

12
10
16
1
1

322 =	Bruise	211 pbs	Something in black
323	Dent	59 "	Missing
324	Dent	145 -	"
325	Bruise	377	done by cleaning Tool
326	Bruise	193	Something in black

Discarded Moulds 17th Aug/16

327 = Surface Spitty Cracks - 291 print
back only little pitted
Went as far as it would

328 = Mottled surface - 237 print
Back badly pitted fine - 003 -
Continuous bad surface -

329 = Mottled surf = 216 Print
Back moderately pitted =

330 = Mottled = 216 pbs Back mottled
surface very bad

331 = Mottled = 244 pbs Back faint Mottled
002 - Slight Run Out rough
surface

332 = Mottled = 286 pairs. Back very fine
mottle 001 - Rough surface -

333 Crackly surface = 511 pls
pretty good back = Bad surface -

334 = Rough surface - 397 pls
Back-Mottled Considerable in mid R
Rough surface

335 = Spelly + dump - 275 pairs -
Back Mottled - slight R
surface bad

336 Mottled - 261 pls - back pitted
Bad Run out & Crackly

337 Mottled - 256 pairs -
Back slightly mottled -
Bad Run out

338 Mottled 145 pairs - back
good - Run out

339 Mottled 287 pls - back has
fine mottle - surface
Crackles & Run out

340 Mottled 232 prints - back
good - Run Out -

341 - Mottled & Spotty Surf - 272 prints
back good - light Run out - fine
Surface Spotty -

342 Mottled Surface - 272 pls -
back Mottled - Bad Run out
Land Surface

343 Mottled - 152 Prints - back
good - Run out & rough
Surface

344 Rough & Crackly - 218 pls -
Surface rough & crackly Bad run out

345 - Mottled bad & Crackly - 170 pls
light Run Out - Surface good

10/16

Surfaced -	19
Bruise	4
Dent	2
Buckle	1
	<hr/> 26

346 = Bruise - 3 prints = something in blank

347 - ^{Dent}~~2~~ 179 prints - new ring

348 = Bruise 20 prints something dropped on

349 Buckle 37 prints -

350 - Dent 115 "

351 Bruise 112 pts grit

352 Bruise 96 pts —

8-22-16

	Temp	
Started 830	106-	Steam on
9 am	106	"
10 "	104	"
10.15-	126	Steam off-
1030	126	Water on
1045	125	Water off
11 am	124	"
1130	134	Water on (shutoff Vac
1145	126	Water off (to start alcohol Dryer)
1200	125-	"
1 pm	125-	"
1.15	125	<u>Water on</u> Powder dry
1.30	122	
1.45	116	
2 pm	110	
2.15	105-	
2.30	103	
2.45	98	

Powder 4 3/4 hours Drying
1 1/2 hours Cooling

Vac 27 to 28"

1273E

See further on
Moulded Clean

Hoffman - Make one
Vac Dryer full of powder -

not allowing temp to
go over 125° F. keep
time when alcohol is
practically all out
Vac 28" or more needed

Print 4 Rounds 1261E

Schedule - before
making further blanks
of OK Gun make all
blanks -

Print Reg Varnishing
with 2 brushfuls

1274

1275

1276

[illegible]

1274E — 1275 — 1276 —

Loading Export by Diamond Die
 1 round each +
 Run them on 1261 Scheuch
 2 Squashfalls —

1274E Powder put in pile in center worked
out with hand scraper - after pressing
sheet rubber railroad powder is pressed
down by hand - before put on scraper
1261 E. schedule 1 and four all
three tools 2 brushes - finished
Req -

1275E Rakid across - worked
with hands, scraped off -
otherwise same as 1274

1276E Same as 1275 Except
Sheet rubber is put on in
loading box

1277 E.B.

		X	
		X	
	X		X
	X		X
	X		X
			X
	X		
			X
	X		X

83%

41%

91%

66%

1277 E

Huffman Make 2 rounds

1261 Schedule -

Load the mould by filling
a cone as now but
rotate the spreader -

1261 Schedule -

2 brushfills -

Print Ring

Apparantly parallel chs
Come no matter how its
loaded, several tests

1279 E

[illegible]

1279E This is pretty good but
flows too much yet, some bug
somewhere else
Hoffman

Make another Vac
Dryer full of powder 125° Fahr
Cool with water —

Grind the powder put ~~in~~
Two cans full away

Would 4 Rounds -

1261 Qahadilo —

2 Brushfields

Print Recy —

Then hold the 2 Cans

1 of which after 2 1/4 hours

Make 4 rounds + increase

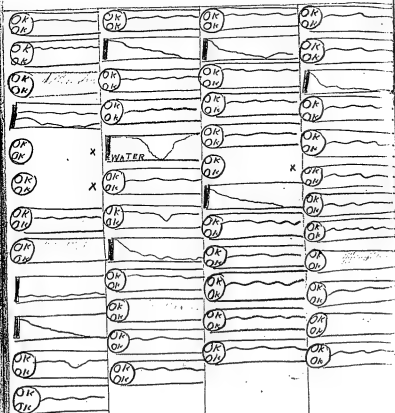
At 1280E The other

Can hold for 48 hours

Can hold for 10
 & mould under 1281 E
 Moulds Clean, same moulds on 4Rm

1281-E

9/29/60



75%

75%

83%

91%

16%

00%

8%

00%

1281 E

Same powder as 1279 E
but had 75 hairs
in closed Can

C1013



Note that 1273 powder used immediately gives better drop test than 1274 which is same powder kept in bags 12 hours & hydrated —

Note = Records that after

Printing shows the full barrels do not flow on 1261 schedule are almost free of parallel cracks & are good. This apparently can be attained by not going above 175° in Vac & cooling in Vac & keeping powder in closed cans so wood fibres cannot absorb moisture, & grinding it so powder don't go which above normal temp in grinders & keeping powder in closed cans will used —

Good results are obtained by keeping away moisture although powder gets hot in grinding — but its best to have grinders cold as possible by a water jacket etc.

1282E

Drop Test

Aug 25/16

20-2-9-1.-12-20

[illegible]

Calliper

Autisme

$$\left. \begin{array}{r} 219 \\ 214 \\ 224 \\ 212 \\ 212 \\ 218 \end{array} \right\} 217$$

217

91.-%
83 1/2

100%
41%

91%
83%

100%
584/2

Cracks very fine

1282 E

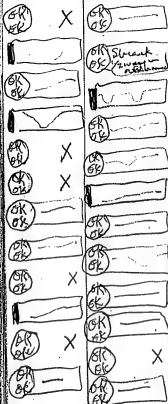
Hoffman make up one dryer full
of powder $3\frac{1}{2}$ parts Wooded fibres
 $3\frac{1}{2}$ parts of Chalk & 1 Shellac
Dry at 125° Fother water Coal
Grind some immediately &
Run thru 4 Rounds - & also
fill Two closed Cans of
ground powder, & will let
you know what to do with
Cans -

Make blanks on 1261 Schedule

2 tree-toads & 1 percent Ray
Same old mounds for 4 r. mounds moved
clean but had left as if air got in.
don't hunt in working black but may give mounds up stairs
CIV.

Unit 3
11 grey spots

Unit 2
10 grey spots



75%
41%

83%
8.6

Dumordius Epomus

Records filled before

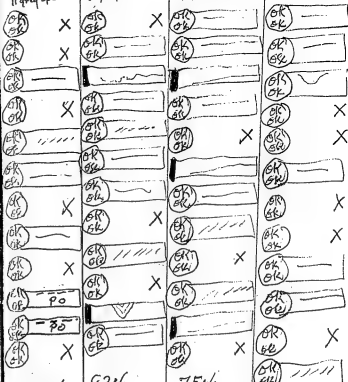
1738 E Unit 8 - Inspection before Van 11 grey spots
see top of each column

Unit 8
11 grey spots

Unit 4
8 grey spots

Unit 10
9 grey spots

Unit 7
10 grey spots



100%
50%

83%
25%

75%
25%

100%
41%

1283 E

OK	X	OK	X
OK		OK	X
OK	///	OK	X
OK	X	OK	///
OK	-	OK	-
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X
OK	X	OK	X

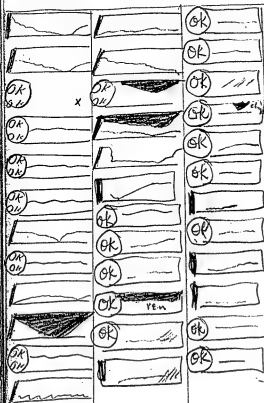
100%
75%

100%
75%

1283 E

Print 2 Rounds reg blanks
not bevelled but sharp
 Edge taken off by file -
 Reg Varnish -
 Reg Print -

1284E



50%

50%

75%

8%

none

none

1284E

Hoffman = make some
Reg powder. 200 lbs more
or less want 4 Rounds
The powder is regular
but the amount of
Lumpblack is doubled

Blanks to be made
1261 schedule

Varnish 2 barrel full

Print Reg

Same moulds used for 4 rounds
Moulds clean except each time
wiped off with dry cloth.

1285 E

Kurchar

not yet

Print 4 rounds with
blocks that ~~are~~ have a
different bevel - you will
have to change one bevel
machine -

1286 E

OK		OK	
OK	X	OK	po
OK	pull	OK	
OK	pull	OK	po
OK	X	OK	
OK	X	OK	X
OK	pull	OK	X
OK	pullout	OK	
OK		OK	po
OK	X	OK	X
OK	X	OK	X
OK	pull	OK	X

100%
41%

91%
41%

95.
41

1286 E

Select 2 Rounds of
blanks



Varnish + Print Bag

Note fine line near

Edge pull out

This seldom occurs regularly
when it does it, probably
leads to a thin blank saving
a thin Edge

1287E

OK	X	OK	X
OK		OK	X
OK			
OK		OK	X
OK	X	OK	X
OK		OK	X
OK		OK	X
OK	X	OK	X
OK	po	OK	
OK	X	OK	X
OK	X		
OK	X	OK	X

100%
50%

83
75%

1287E

Select 2 Rounds of
blanks



Print of Terminal Reg

Note almost absence of
line Pull out in thin
against 1286 Thin Edge

Thin Edge
95 Cornal
41 perfect

Thick Edge
90 Cornal
62 perfect -

But 1283 Reg blanks Not Bevelled
is better 100% Cornal
75% perfect -

1288 E

OK	X	OK	—	OK	X
OK	X	OK	X	OK	—
OK	X	OK	X	OK	X
OK	—	OK	—	OK	X
OK	X	OK	X	OK	—
OK	—	OK	—	OK	—
OK	X	OK	—	OK	—
OK	X	OK	X	OK	—
OK	—	OK	—	OK	—
OK	—	OK	—	OK	X
OK	—	OK	X	OK	—

91%
50%66%
50%66
33%

1288 E

1280

1285

1288

were in one

even

all double Van

Hoffman-

May be bad schedule
in 1280 + 1285 wet 1288
was in but then a single VanMake some powder, mixed 1/2
longer in the mixer than regular
run it then in Cans + shake
up 4 Rounds 1261 schedule2 Brucell's Varnish
Print RegThis to go them on 1250 lbs
+ coal in Oxy lot which
is now at under4 rounds came moulds kept clean
except had to go off each time with
dry cloth,Note = it is not true that blanks
which don't show flow + even is
shown full dirt crack = This 1288
presents bend + no flow + dirt crack

OK			OK	X
OK	X	OK	OK	X
OK		OK	OK	X
OK		OK	OK	
OK	X	OK	X	
OK	X	OK	X	OK
OK	X	OK	X	OK
OK	X	OK	X	X
OK	X	OK	OK	
OK	X	OK	OK	X
OK	X	OK	OK	X
OK	X	OK	OK	
OK	X	OK	OK	

100%
75%

91%
50%

91 %
50

75%

50%

50

1289 E

Kurzer-

Make 4 Rounds regular
blanks not bevelled but sharp
Edges off with file

blanks not bevelled. but sharp
Edges off with file

Edges off with if cl

Req Var Req Print, recommended

OK	X	OK	X	OK	X
OK	X	OK	X	OK	—
OK	X	OK	X	OK	X
OK	—	OK	X	OK	X
OK	—	OK	—	OK	X
OK	—	OK	X	OK	
OK	—	OK	—	OK	X
OK	—	OK	X	OK	X
OK	X	OK	—	OK	X
OK	—	OK	X	OK	—
OK	X	OK	—	OK	X
OK	X	OK	X	OK	—
OK	X	OK	X	OK	—

100%
50%

100%
66%

100%
58%

1290E

Hoffman

Make 4 Rounds regular
blank on 1261 schedule

These blanks not to be
bevelled, sharp edges
taken off —

Varnish 2 brushfuls

Print Rep

Wardle -

Run a Vac Dryer full of
Powder using only fresh
Alcohol -

4 Rounds - 1201 schedule

2 rounds full Vac -

4 Rounds Reg blank schedule

Duplicates these from cans
saved 4 24 hours old

This should show if its
the alcohol -

And is I will get a rectifying
still -

~~Donelli~~

Dunwoddie -

You better raise temperature
of vacuum Drier from 125° F. to
to 150° since we have
found it not oxidation,
When we get good results
it was 160° - 150°
with 27 @ 28 vac well.
Take water out, sure a give
Margin for neglect,
by having temperature
too low -

1291E

8/30/76

Quartz #5

Quartz #5

Quartz #8

Quartz #8

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

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OK

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OK

OK

OK

OK

OK

OK

OK

OK

OK

83%

83%

75%

83%

58%

16%

33%

58%

I propose following level

1291E

(see also 1291E/B
after 1302)Make one vacuum dryer full
with powder using only fresh
alcohol - 150° Fahr in Dryer Coal
by water -Put in cans by scoop take
enough from each can to
make 4 RoundsRun on regular Vacuum +
but 2 rounds in one turn 2 under
Print Schedule

See next page

Regular

moulds clean -

C35

1295-E

9/5/11

[illegible]

1295 E

Dup of 1294E
But with scoups 24
hours after water

Rosin will lower the
Melting point of Shellac
& make it stickier which
may be what we
want. Dealer guaranteed no
Rosin but I think at
times it gets in -

Dumond die -

If any of these show up
good, Duplicate using
1261 schedule -

& also to see if nothing
has changed Duplicate

with Regular poor
Sheelac as we now
use -

~~to~~ Note 1297 if it
comes out OK might
Duplicate on 1261 schedule
This will show if Rosin does
anything

1299E

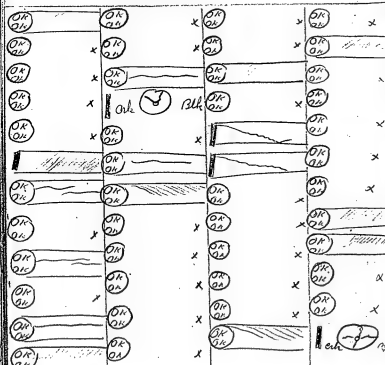
S Pennels

8/31/16

1299-E

S Pennels

9/5/16



91%

91%

83%

91%

91%

100%

100%

83%

50%

66%

66%

66%

25%

58%

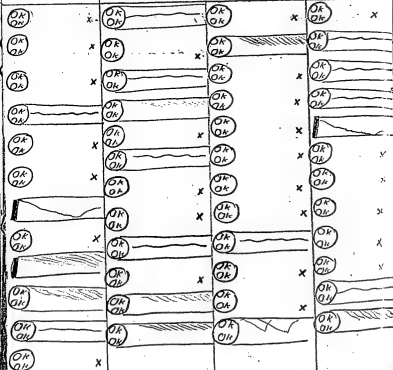
83%

41%

C1573

1291-E-13.

12/5%



83%

100%

100%

91%

58%

41%

75%

50%

1291E-13-
same as 1291 except 1261 schedule
moulds clean.

1303-E

9/6/76

Hand-drawn sketches of four different types of fish, labeled 100%, 91%, 100%, and 100%.

100% 91% 100% 100%

75% 66% 75% 91%

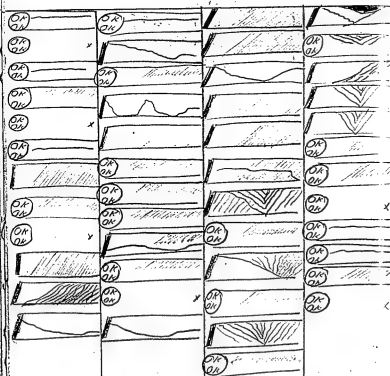
1303-E

Powder in cans through process—
 between drive and grinder 8 hours—
 between grinder & screens 8 hours—
 between screens and blanks 2 hours—
 Regular all thru—
 8th rounds—

[illegible]

1304-E

9/6/



66%

58%

25%

58%

25%

8%

00%

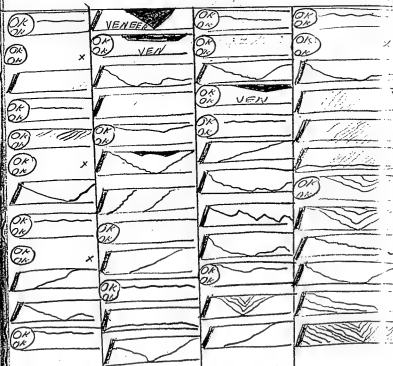
16%

1304-E

Duplicate of 1299
 4 rounds
 all new alcohol

1305-E

9/4



66%

33%

41%

25%

25%

00%

00%

8%

1305-E
 Duplicate of 1300 E
 4 rounds -
 all new alcohol

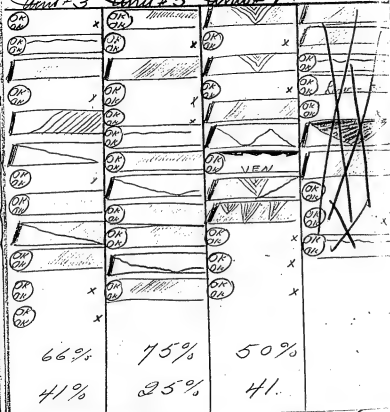
1306-E

Mr Hoffman

Please make me load

of blanks from each unit in which powder is loaded a little more in the center -

Unit #3 Unit #5 Unit #7



9/8/-

1307-E

9/8:-

Mr. Hoffmann.

1307-E

Mr. Hoffmann - Please make a full batch
of powder with 10 more stellac -
Duplicate of 1271 E - Except use
bag - Mark it 1307-E
Send 8 rounds to Miller -

[illegible]

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Aug	Concl	Perfect	Yen PO	Rounds	Records New M	MM Ven	MM BIO - 2 Ven	%
18	92.7	66.5	25%	40	303	—	2 Ven	63%
21	94	66	20%	40	290	—	2 Ven	60%
22	96.2	71.4	10%	40	291	—	1 Ven 70%	60%
23	89.1	72.2	10%	40	343	—	1 Ven 80%	71%
24	92.7	78.9	10%	40	378	—	1 Ven 80%	78%
25	91.2	73.9	10%	40	397	—	2 Ven 70%	80%
26	90.2	64.6	10%	36	368	—	2 Ven 100%	80%
28	83.9	65.8	10%	40	427	—	51 PC	88%
29	90.7	75.4	10%	40	447	—	2 Ven 100%	93%
30	81	66	10%	36	379	—	1 Ven 70%	87%
31	89.7	76.4	8%	40	458	—	2 Ven 35 PC	95%
1	86.4	68	10%	40	473	—	2 Ven 40%	98%
2	95.8	84.7	5%	36	432	—	13 PC	90%
5	88.7	74.5	3%	40	477	—	1 Ven 35 PC	99%
6	80.9	63.4	0%	38	456	—	43 PC	95%
7	91	56	15%	40	480	—	1 Ven 20 PC	100%
8	91.4	65.8	10%	40	480	—	32 PC	100%
9	91.2	71.7	9%	36	433	—	20 PC	100%
11	94.5	72.6	10%	40	480	—	18 PC	100%
12	93.7	79.1	3%	40	480	—	21 PC	100%
18	83.9	74	2%	40	480	—	25 PC	100%

Wages

Mould Repairs

Grade 1	Preparation 22 1/2 C hour	
" 2	Repairs without instructions	25c
3	Medium quality of work	30
4	Expert repairs	35
5	Foreman's instructions spent	40

Mould testers -

Preparation -	22 1/2 cent
1 month	25
2 "	26
3 "	27
4 "	28
5 "	29
over 6 month	30

Nights 10% more -

Pressmen & Mould assemblers

Preparation	27 cent
1 month	28
3 "	29
6 "	30

Bonus

If more than 25% of moulds in actual use in pressmen are discarded for Dent. Bonus or injury due to careless handling
No bonus paid

If Discarded are	5% bonus
25%	10% "
25	15% "
15	20% "
10	

adding bonus	if	15	10
27c	25	20	
28	283	297	31
29	294	308	324
30	304	319	336
	315	33	348
			36

Night crew 1/5 more bonus than day

Mould Holders Clancy has
 14th recd 43
 Square edged

15	40	773
16	43	816
17	37	853
18	37	894
19	13	907
21	41	946
22	40	988
23	36	1024
24	35	1059
25	50	1109
26	50	1159
28	18	1177
29	24	1201
30	39	1240
31	40	1280
SEP 1	19	1299
2	35	1334
5	21	1355
6	40	1395
7	35	1430
8	28	1458
9	38	1496
12	16	1513

Total 1651.
 % of all
 44%

46%
 49.4
 51.6
 57.4
 59.4
 62%

Sept 13
 14
 15
 16
 18
 19
 20
 21
 22

23
 19
 10
 17
 9
 10
 9
 8
 6

1537
 1556
 1566
 1583
 1598
 1608
 1611
 1615
 1625

Aug 14 - 1916

Clancy-

Mould Holder Inventory

Bevel Edged	534
Square "	626
Waiting for bushings	107
Not yet inspected	26
require repairs	18
	<hr/> 1311

Revs

OK ready to deliver	11
to be refinished holes plugged etc	27
to be inspected & slight fitting	50
to be polished	61
to be lapped	18
in process of fitting rings	86
rings drilled & tapped	62
with rings to fit	25
	<hr/> 1651

Discarded too thin can have piece
put on the back

41

Have blanks for plates
" " rough turned

137
34
<hr/> 242
1651
<hr/> 1893

[ITEM(S) FOUND IN BOOK]

444-E Varnish with Lead Resonate
supposed to have been used on
previous experiments (1381).

[ITEM(S) FOUND IN BOOK]

No-1445-E. Resonate of Lead
free from Resin. Put through
fine grinding point mill with
alcohol then alcohol filtered off
on vac filter Resonate not allowed
to dry. filtered OK through two thickness
of linen

No-1446-E. Resonate of Lead free
from resin that had been dried
rewet with alcohol then filtered
to get rid of alcohol. cake not
allowed to dry then put in
mortar with a little varnish
to work up the cake. filtered OK

[ITEM(S) FOUND IN BOOK]

1447-E. Made Peroxide of Lead
washed on filter with water then
partly washed with alcohol on filter
then give one wash in flask to
extract resin filtered off alcohol
then took 10g- ground in mortar
with a little Varnish to work out
the lumps then put in Big
mixer run 1 hr - filtered OK

1448-E. Dup of 1447-E except two
treatments with alcohol to extract
resin (No-1447 + 1448 to much
chance for water also to much
alcohol required

[ITEM(S) FOUND IN BOOK]

1452-E. Sup of 1448-E except
filtered through 1 thickness of
linen

1453-E Made with resin extracted
from Resonate of Lead which
has given good results - the
resin contains some lead
6. grams resin

175 " Varnish

1454-E Made with resin extracted
from lately made Resonate of
lead

6. g. Resin

175 " Varnish

[ITEM(S) FOUND IN BOOK]

No. 1454 E

Made with Resin that contains lead
that was extracted from Resonate of lead
that has been made lately

No. 1455 E

Resonate of lead, made with
40 g. NaOH at 20 Be.
40 g. Resin + Lead Nitrate sol.
Hard filtering had to change linen
twice

1456-E

Resonate of Lead
40 g. NaOH at 20 Be.
50 g. Resin + Nitrate of Lead sol.
Hard filtering Resonate of lead not all
dissolved

[ITEM(S) FOUND IN BOOK]

1457-E

Resonate of lead made with
40g NaOH at 20 Be
30g Resin + Nitrate of lead sol
Hard to filter, had to change

1458-E

Resonate of lead made with
40g NaOH at 20 Be
25g Resin + lead nitrate sol
Hard filtering

1459-E

Resonate of lead made with
40g NaOH at 20 Be
20g Resin + lead nitrate sol
Hard filtering

[ITEM(S) FOUND IN BOOK]

1461- OK (Kally's No. 14)
5 grams (Resonate of Lead)
175 grams Varnish without Soap
Black. Very bulky

1465- OK
8 grams Resonate of Lead
175 g Varnish without Soap
Black. Very bulky
hang filtering

1464 top of No. 14 Kally's No. 1 Resonate
of Lead. N.B. made light black
top of 1462 except for
1463. ~~Kally's No. 14 Resonate of Lead~~
10g Resonate lead to 175g Varnish OK
stand to filter

[ITEM(S) FOUND IN BOOK]

1462 (Laird's Resonance of Lead 2633
59 R. Lead to 175 g varnish
Very bulky - Hard to filter.
O.K.

1466 Dup of 1461 Except
made in large batch 33 lbs
Resonance of Lead.

[ITEM(S) FOUND IN BOOK]

1849E

Our loading mach. from lat.
Blanks caliph.

- # 1 - 214 - 244 - 30
- 2 - 225 - 234 - 19
- 3 - 251 - 258 - 7
- 4 - 228 - 262 - 34
- 5 - 223 - 261 - 38
- 6 - 240 - 265 - 25
- 7 - 211 - 239 - 28
- 8 - 234 - 249 - 15
- 9 - 243 - 253 - 10

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 19
Notebook, N-16-09-07

This notebook was used by Edison during September-December 1916 for notes on experiments to improve the manufacture of disc records. There are also notes by William W. Dinwiddie, Archie D. Hoffman, and other experimenters. The entries describe a sequence of experiments numbered from 1308E through 1388E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. Some tests involve variations in the varnish preparations used to coat the record blanks or in their method of application. Flaws and successful results are both noted. One notation indicates that the results of experiment 1381E were reinspected in January 1917. At the end of the book are tallies of record blanks produced. Some notes are the form of instructions to Hoffman or Dinwiddie. The front and back covers are labeled "19." The pages are unnumbered. Approximately 150 pages have been used.

9/7/6

1308-E

Powder blank press experiment -
Cold press 600 lbs -
Stem on 7 min.
Cool 10 min.



75%

33%

11309-E

9/7/16

OR QA	X
OR QA	
OR QA	X
OR QA	
OR QA	VEN PQ
OR QA	VEN
OR QA	
OR QA	X
OR QA	X
OR QA	X
OR QA	
OR QA	VEN PQ
OR QA	X

100%

50%

1309E

Powder blank from experiment
 Cold press 600 lb.
 Steam on 8 min.
 Cool 10 min.

1310 E

9/7/12

1310 E
Powder blank press experiment.
Old press 600 lb
Steam on 9 min
Cool 10 min

2A	VEN	
2A		
2A		x
2A		x
2A		x
2A		
2A	PC. R2	
2A	VENTOL	
2A		
2A		
2A		
2A		
2A		

83%

85%

1311-E

9/7/5

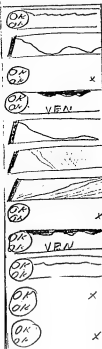
1311 E
Powder blank press Experiment
Cold press 600-lb
strain an 10 min
Cool 10 min.

91

58%

1312-E

9/7/6



66%

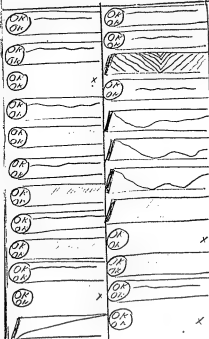
33%

1312-E
Powder blanks press experiment.
5 min contact with steam
5 min high pressure
10 min, Cool.

If blanks appear to need
it use two blanches of vanishes
This applies to 1308-E to 1312-E inc.

13 13-E

9/1/14



91%

58%

16%

16%

1313 E

Two rounds of regular
blanks varnished with two
brushes of varnish.

Regular in all other respects -

[illegible]

1315 $\frac{1}{2}$

Dup of 1314E

4 Rounds blanks
made on 1261 schedule

Yarnall Z. Bushfield











Parent Reg

Leaver: Mowd's duty

48 Made 2 made 3 full C
1 chalk spot 42 Natives

1316-E

9/13/6

	OK OK	x		OK OK	x
OK OK	x	OK OK	x	OK OK	x
OK OK		OK OK	x	OK OK	
	OK OK	100% 130	OK OK	OK OK	x
OK OK	x	OK OK	x	OK OK	x
OK OK		OK OK	x	OK OK	x
OK OK	OK OK	OK OK	x	OK OK	
OK OK	x	OK OK	y	OK OK	x
OK OK	x	OK OK	y	OK OK	x
	OK OK	OK OK	x	OK OK	x
OK OK		OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
75%	83%	100%	100%		
33%	58%	50%	58%		

1316E

Take a bag of regular powder
put in a closed box over
a pan that has inch of
boiling water in —

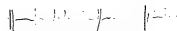
let it stay 24 hours —

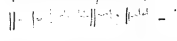
then make up 4
Rounds of blanks.

Print Rec
leave Mord. 1/2 in spots
48 Macb 48 Silver

1319E

my C-1 is of this -
Amorphous Copper,
Nickel plated - heavy plated

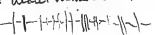
12th - 

348th = - 

not any difference between 12th or 348th
the very good record on 348th -

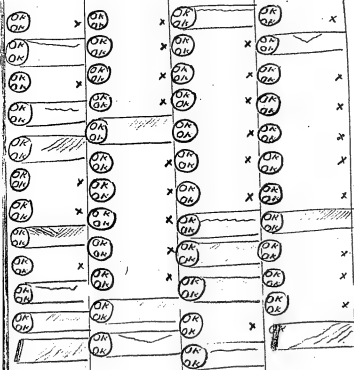
last Spg Scanner is even better

V. surface after 348th
Good = about same as 348th the good

825th -  Cut out

Very Chocky surface 1st inch gradually
gets better. No sharp that caused
Cause or decreased
This has been terribly injured between
600th + 825th

1320-E



91% 100% 100% 91%
41% 75% 58% 75%

70.5%
62.1%

1320 F

Print 4 Rounds blanks
not bevelled, ~~Exposure to~~
~~take sharp edges off with~~
file - Varnish Edges

Reg one brushfull Varn

Print Reg

Looks as if Square Edges were as
good as Bevelled with square
Edged Moulds

1321

OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK		OK OK	
OK OK		OK OK	X
OK OK		OK OK	
OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	OK OK	
OK OK		OK OK	
OK OK		OK OK	X
OK OK	X	OK OK	

100%

100%

66%

33%

9/13/16

1321E

Just take one powder blank
 Morels & turn it out as it produces
 a blank which will fit the
 Record Mould holder with
 only .004 shake -
 It has .010 nose -
 You can see it.

1322 F

Fred Ott weighed out 50 grains
fresh blank powder just as it
comes from the screens

Put it in a closed box
with warm water under it
after 3 hours weight

1.45 pm 50 grains

4.45 " 51.080 "

14 hours more 51.780 "

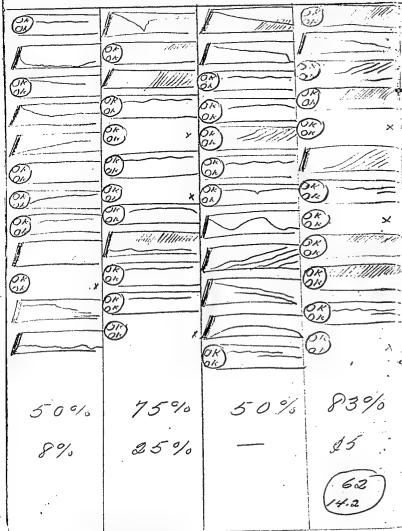
1324-E

9/13/11

1324E

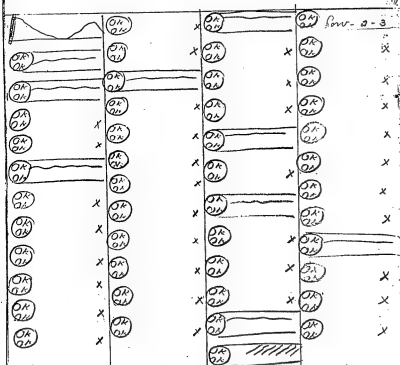
Dup of 1323

Except 30 mesh screen



1325-E

9/11



91%

100%

100%

100%

66%

91%

58%

83%

97.3
74.2

1325 E

Hoffman

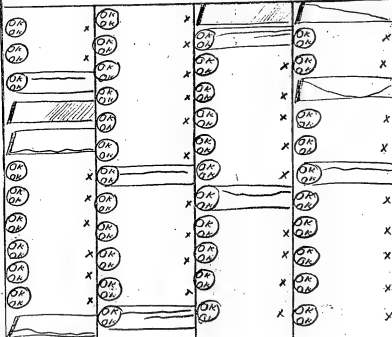
When 20 mesh screen is on
grinder, Run peacocks over
screens 5 times to get all the
Coarse you can through
+ Make 4 Rounds
of blanks

Reg Turnish Reg
Print

235J

1327-E

9/24/46



75%

100%

91%

83%

66%

83%

75%

75%

1327-E

Special Screens.
 Steel - 24 mesh - 28.135 wire
 on Fuller mill.
 Screened 5 times thru newaygo screen-
 Mould - Varnish and print regular

Fineness of Ground Powder { 73% pass 180 mesh
 { 48% " 350 "
 Sifted powder { 96% " 180 "
 " { 68% " 350 "

{ 390 pounds were ground in one hour,
 271 " fine - 69.4%
 119 " tailings

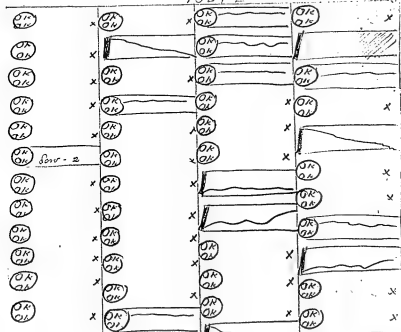
1 1/2 minutes required to sift-passing
 2 screens connected parallel so
 that half went thru each 5 times.
 1st screening - 89 lbs fine 301 lb tailings
 2nd screening - 81 lbs " 220 " "
 3rd screening - 36 lbs " 184 " "
 4th screening - 34 lbs " 150 " "
 5th screening - 31 lbs " 119 " "
 271 5119 *left*

Moulds clean.

→ see next page

4/22/6

1329-E



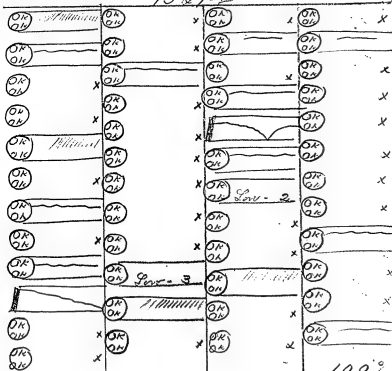
100%	91%	75%	75%
91%	75%	50%	50%

1329-E

Same as 1328-E except that tailings from 1328-E are reground with it.

OK 2A - 1-E

1329-1



100%

75'

91%

100%

91%

50%

75%

50%

Knud's
 cr. 80 Pm.
 Conn 88.
 Elect 64. 4

1330-1261-E

1330-1261-E

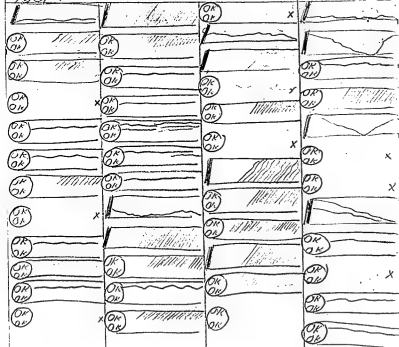


100% 100% 100% 66%

75% 66% 83% 66%

CSS

1231-E



91%

75%

66%

66%

25%

—

25%

25%

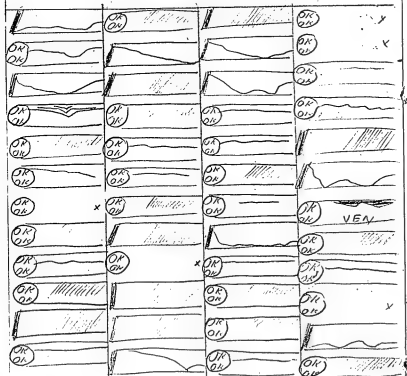
1231-E-

8 rounds regular powder
moulded on 1264. Residue
darnish 2 brushes - print regular.
Regular powder is made
from only the (shell) lace with
all hard lumps removed, and
blanks are running good now.

→ See next page

1331-E

7/23/4



75%

50%

66%

75%

8%

5%

2.5%

Removal Coverage on
8 Panels

Cover 70.5%

Project 14.4%

1332-E

Mr Hoffman will make 4 rounds
on 1261 Schedule and send to Mr Kinder

1332-E

Mr Kinder will have corners sharp
edge taken off with a file -
Varnish with all the varnish it will
take - 2 brushes -

Print in square edge moulds that
have not been used for level
edge blanks and have corners
clean!

Send to Mr Miller in Building 4.

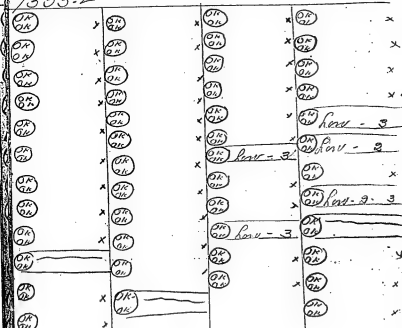
See next page.
for the Experiment

1332-E

1332-E

Dist.	Barre Point Round			General Average		
	Barre	Point	Round	Barre	Point	Round
10	97.3	58	4	97.3	58	
11	95.6	72.1	4	96.45	65.1	
12	95.1	63	4	97	64.3	
13	100	72.2	4	97.7	66.3	
14	100	85	4	98.2	70.3	
15	100	57.3	4	98.5	67.9	
16	97.1	63.8	4	98.3	67.3	
17	100	68.1	4	98.5	67.4	
23	100	85	4	98.6	69.3	
24	98	80.1	4	98.6	70.4	
25	97.3	83	4	98.4	71.6	
26	86.2	57.3	4	97.4	69.9	
27	93.1	79.1	4	97.1	70.6	
28	95.3	76.3		97.2	71.2	

1333-E



100%

1000

1.00

100%

91%

9/5/5

83%

66%

1333-E

Kinder

1953-E ^{Green}
4 Rounds regular blanks
varnished with 2 brushes varnish
like 1261 - Give them all the varnish
they will take in one coat -
have edges square - just
take sharp corner off with
file,
be sure to varnish edges -

the same corners of moulds are clean -

Ocean -			General Average	
No.	Amount	Particulars	Amount	Particulars
Oct 10	100	78.3	4	82.3
11	100	78.1	4	82.6
12	95	78.1	4	78.4
13	97.3	78	4	78.5
14	98	60.1	4	82.5
15	95.3	78.1	4	80.9
16	90.1	81.2	4	80.9
17	74.6	83.3	4	81.2
13	95.1	57.8	4	78.6
24	96	79.1	4	78.6
25	93.2	82.1	4	78.9
26	70.1	29	4	93.9
27	70.2	60.1	4	73.6

1335 - Mr. Kricher -

Take blanks with dry spots before
placing in oven and give
a another coat of varnish on the
spots - send 4 rounds to
Miller in No 4 Building.

7
2
2

1337-E



83%

66%

91%

83%

25%

33%

33%

25%

1337-E

four rounds fresh powder
regular in every way,
Send to Miller in Building 4

1340-E

11/19/44



75% 66%

50% 41%

1340-E

One quart regular 1511 Varnish
without lamp black - viscosity 17-25 sec

This varnish to be used on blanks
that have been varnished in regular
way ready to go in the oven. So
that the blanks will have two
coats varnish - one with lamp black
and one without.

Print regular and deliver to
mills in Building 4

To be examined for surface as
well as other defects.

1340-E-3 Same but 3 inch viscosity.
1340-E-2 " " 2 " "
1340-E-1 " " 1 " "

See five pages Facts
in regards to these three
Experiments

1343-E

11/21/16

1343-E

Duplicate of 1342-E
but 9 1/2 6 1/4 -
Print one round

To be held & tested
by our Editors

Pull Out and Measure

91%

91%

1347-E

Make up a large batch of Peabody
Garnet fac.

There is one bag. use it all - make
all into blanks.

Note any differences between
garnet & regular TN - suspect
blanks well and run thru factory.
Have records inspected.

72.9% passed

Exp. Mxchm of final

613

parallel Cks 100
Radial 32

91% of total 2123 OK —

1348 E

Make $\frac{1}{2}$ doz blanks
with old small brush
one coat, bake Reg
Print one record from
the test Master Record
on one blank, Save the
other blanks —

1349 =

Peculiar thing about
this is large Pull out in
Labels -

This should be easy
to eradicate -

Probably not enough fibre
to give strength enough to
withstand the deep matter
pull -

Apparently no improvement
in general surfaces
which is strange

1349 - E

make up one (drier full)
lot of blanks 4 chalk 13 ft
1 each

Save 50 good ones for Echin -
then balance them Reg & have
% inspection

69.3% passed

Eys Machine & formal

345 Records

Pull in Labels 27.5
Parallel Chs 57

no radial

Drop test

7-8-20-4-13-9-

61

This is good enough

1350E

Varnish 6 Reg blanks
Reg Gals,

Use Varnish marked
China - ~~the~~ shake it
well before pouring in
Cup -
Sends blanks to Edison

Print on test Maslan

The surface was very
soft. 8% China clay

1351 F

Cus.ous - Blank yellow
fasi - Print counts about
irregular perhaps little
more scratch -

No lumps at all

Considering Cutting silica
not promising as doing
away with scratch

Record looks OK

1351 E

Varnish 6 Reg blanks

Use varnish marked

Kieselghui - shake it
well before using

Bake Regular

and blanks to

Edison

Print from test master

Nov 28/16

1352 E

Tried putting bag Van on -
Celluloid + printed - it stuck
to moved only $\frac{1}{3}$ stand on
Celluloid - This not good -
as it will not stick -

One was good - This is
being grafted + moved
made -

Print it


1353 E

Varnish to ~~record~~ ^{blanch} with var
marked no black.

Booke Reg—

Send to Edison

The scratch is about normal
but its Very Sharp hence
more noticeable,

Phenomenon 

Make Varnishes with
Cork Lina
Magnesia -

1354E not tested yet

1354 E

Reg Varnish without Lampblack
to which is added. 5% by
weight of fluffy lampblack
made by Smith & mixed in
Spring Chamais mixer

~~Reg~~ Varnish & blacks -
from bottle marked Smith black

Reg way & take reg
Send to Edison's tests no better
than Reg blown black
~~the is about same as Reg~~
~~blown for acceptance~~
~~but is less bluish than~~
~~others~~

1355 E

Peculiarly of this is -
absence of Parallel Cracks
& Excess of radial cracks.

1355 E.

One drier full powder - first
mix dry (without shellac gum) in thicker
wood - chalks and lamp black.
Then grind in large Fuller mill
Then mix with gum regular
Dry and screen regular -

Mould regular - Keep record of
inspection - Print regular two
rounds on new moulds.

Hold two rounds unvarnished -
Print others and keep record of
inspection.

~~Tried to make by drops -~~

84.4% passed

Eye-Microscope formal

366 Rec'ds

PO in labels 12

Radial - 26

parallel 1

1356-E Smith Camp Black
Varnish 6 regular blanks
print & send others
to Mr Edison in Bldg. #4

~~2000~~

1357-E

Diminutive Plain Varnish &

Mixes with this Varnish Regular
ways & take to Compant -

This is recipe for Varnish, which is just little
pot of oil, spring fingers to break
clots of dandy black

Print & send 1.714. E. L. in
in Building # 4

~~W. T. C.~~

Surfaces of blanks not near as good as required
29 made 15 Discards - 5 were cracked 10 had pull out
~~off~~ 14 sent up stairs to Varnish, after Varnishing
5 more developed cracks. One selected for
Printing which was OK gave crack after
Printing - The blank itself cracked, ^{OK}
around 2d edge - Edge shiny all around for
1/4 @ 3/4 wide, poor loading for this much
blanks cut much harder than reg
Stopped 2 both went to scrap

Much louder than Reg + cracks no
more if not less than regular

In strike off at loading hopper powder seems
to pull apart, powder packs firm in small
press 3/16 strike off on turn table powder
peels apart on turn table strike off leaves much
cloudy + dusty

The resinate may have more contraction
than Run alone may be because
blanks crack -

1358 E

Hoffman

Make 50 blank batch

Run 4 Rounds Varnished
Regular Gloss ~~except black~~
Varnish - Send to Edison

Wood 28 $\frac{1}{2}$ lbs
Chuck 21 $\frac{1}{2}$ lbs

Van

10 lbs Resinate X - down 6th, double dump
35 lbs alcohol - =====

surface of blanks not as good as Reg.

In strike off at loading hoppers, powder seems
to pull apart, powder packs form in small
spaces - 3/16 strike off strikes off fair -
leaves mottled cloudy surface -

23 made - 9 Dicers - 6 cracked 3 pulled out

14 ok -

after turning down 2 more developed cracks

Surface as good as Reg. ~~off~~ but don't
seem as good as 1358 & no lousier than
Reg. 2 dropped both broke at

17 Drops - 1/4 of edge chipping

○ ○ ○ ok -

Shows 1358 & 1359 C don't have proper
loading - too hard around edge
which probably cause of
blank cracking -

1359 E

Dup of 1358 E

Except plain Resin -

1360 E

Varved phosphate Zinc
in place (unp. black)
12% to Var
Var 6 print 1 on
test moved

ng + Rough spots

Phos Zn is very fine leaflets

1361 E

Varnish over second
graphite - 12% of the var

175 var

21 gms graphite —

About same as Reg
no gain - scratches just as bad
fairly black not so
much as Reg

1362 E

Surface fairly good
but smooth ~~smooth~~
would little pieces chip
out, they probably crack
by pressure & chip out
Sign about 003

Too much lamp black makes it
brittle
Same with Castor oil also
brittle, but smoother I think

1362 E

Var with 10% Smith
lampblack -

Var 6 print 1 on
test print

175-grm Var 175 black

Black when vacuumed shows
a continuous surface without
depressions or holes -
but shows ~~some~~ a
fine clots all over -

While the 1368 with same amount
of Smith black but with 5 grains
Castor oil in 175 grm Var is
almost like a transfer & very
few specs -

1363 —

Cuts slightly so as to make
Sharp snap — ^{on smooth} surface
rather sharp — ~~not prominent~~

~~1363~~ 1363 $\frac{1}{2}$

Cuts — General surface
not so sharp as Reg —
Varnish goes on very bad
too much Lampblack

1363 F

145 Varnish
26 grams Lampblack

Vari with 15% of
the Vari of Smith
Lampblack —

~~Just~~ Vari 6 percent
1 with test named

✓
1363 $\frac{1}{2}$ E

dup of 1363 E
except 20% Smith (Bly)

1364 E

Varnish - with
12% of Ferrous phosphate

Var. 6 - paint 1 inch
test mound

Made

Varnish - Very lumpy -
black -

This gives a rather hard
surface & no advantage

1365 F

China clay we have has
got in it - this I removed by
levigation, also found full
pieces of wood that
floated - This can be
got out by following these
3 or 4 thickness of cheese
cloth, after clay is suspended
in water.

This batch ~~of clay~~ after
pouring off water after settling &
added large amount of alcohol
& filtered. Took 10 hours &
dries on plates dimpy - but
took a lump put in alcohol
& shake vigorously all flatted
& is very close to settle out.

1365 F

Var with 20% of
purified China Clay
Var 6 - percent 1
with test mould

175 grams Var
35/grams, this is 20%

Results - Very bad Varnish
pulled out & checks & very
irregular color
Too much China Clay
Wants about 5% probably
3 or 4% better as 5% was
best yet -

1366 =

Making of Resinate

This works fairly well - I don't go out like little experiment

12 lbs Resin took up $2\frac{1}{2}$ lbs of Magnesia, when got very thick - even with high temp

Don't think all Mg has combined

It stayed quite liquid with 2 lbs, after pulling in little more it suddenly changed color to deeper red. This seems to be the point where it starts to rapidly thicken.

Resin was not strained, full black chips must use higher frequency strained

Printed 3, one had full and surface salt + very good

PROMISING

Low noise

He was on old machine & new
shims attached up 4 ft record
very good

1366 E PROMISING

50 blanks ~~120~~

Dup of 1358 except

Use Resin melted +
fed with Carb Magnesia
till melting point goes
way up -

only 3 OK

Blanks $1\frac{1}{2}$ lbs out of $13\frac{1}{2}$ lbs
resinate used was insoluble in
the free MgO + resinate -
ground powder 96 1/2%. 1 lb 180 mesh
passes torn in strike off - 3/16 strike off
Marbles dirty -
36 Blanks made - 23 were pulled out
10 crushed - The schedules
must be changed to make this
work - sent PD to Keller room

1367-F

After powder made go afire in
Can -

97% from 180 -

phs ok $\frac{1}{4}$ strike off

Leaves Maunds dirty

6 made 3 discarded for

pull out -

if this can be solved

it's promising

1367 F

50 blanks -

Dup of 1358 except

Mamtha Copal used

except 8 lbs Copal 35 lbs alcohol

Mamtha Copal dissolves very easily in
alcohol.
Congo Copal don't dissolve about
 $\frac{1}{4}$ of it dissolves & the usual part
is tough & very extensible when
mixed with alcohol &
like Rubber. This may be
good for a lot of things
by thoroughly removing
the resin by alcohol

Phenomenon

African Copal is all this
elastic stuff & I think

1368

Made

175g Var

5 gram Castor oil

10gms Smiths black


The Blank is very black & shining - Has a fine contour surface without holes or depressions - & very few spots as compared with B.G. which is same without Castor oil -

Phenomenon - Evidently Castor Oil in Var produces black from soaking up Var & the whole is on the surface - BOSS if I will put 10gms of surface

Perhaps Phosgene will do same thing. Print fairly smooth but some small chips due to reproduction NG

1368 $\frac{1}{2}$ F

175gms Reg Var 10gms Smiths
Black - 17gms Castor
oil -

Rough, looks awful -
pulls out on smooth side of
records - Is an emulsion as in
micro photos  Lifehoney
Comb - Cuts - NG - not
forming Castor oil
NG -

GW

1369 = seems a little softer
than Reg. but has appearance
more Copchies -

Smooth side has
also checks at certain
places -

Looks favorable for
surface.



1369E

Hoffman

Make 50 Blanks.

28½ lbs Wood fibre

21½ lbs Chalk

7 pounds of clear Rosin

30 lbs. Alcohol -

Keep inspection sheet send
them up to GE Varnished

Reg - one to GE printed

+ one blank sent to Eccleson

Hoffman Report = ground 97½ fine - 150
powder packs good - packs firm in small
pieces, shows lifts when rubber pad taken off
3/16 strike off - leaves moulds pressed
but clean - 34 mounds of which
8 pulled. 2 cracked 24 OK

70.5% OK

1370 - Considerable better
than Regular in softness
of General - but not so
loud & sharp as Reg -
Don't Cut on smooth side -
looks favorable -

1370 E

Hoffman

Make 50 blanks with
Regular Shellac Varnish

Use

28½ lbs Wood

21½ lbs of China Clay

make inspection report send up
starts to 62 Varnishes
Print 1 & send 1 blank to
Edison -

Hoffman Report - ground 96½ lbm 150

powder looks good - packs firm in small
new, shows left when rubber pad taken off
¾ strike off - leaves marks.

dirty both top & bottom -

31 made 12 pull out - 1 machine defect

180K -

58%

lost some fine powder in mixing

(115)

1371 E

Muns shade louder
general surface shade
more soft than Ray
Smooth side much
safter - no cutting 3 times
over

1371 E

Hoffman
Make 50 blanks -

28½ wood fibre

21½ lbs China Clay
Varnish

10 lbs of Resin + 35 lbs
Alcohol -

Hoffman Report - ground 96% there 160
pounds loads good - 10 cabs from in
small press - shows left color rubber
pad taken off 3/16 slide off -
leaves marks dirty on top plates
needs 14 - lost lot of Clay in mixing
9 pull outs - 5 OK 354%

1372E

Varnish without lampblack

175 grains -

17½ grains China clay

5 grains Castor oil

Shade softer General than

Req - The smooth sides

Cuts very bad - too

much china clay -

Castor oil probably

ng = Emulsion

1373 - Rougher than
Reg - Very Good Varnishing
Cuts both sides NG

1373 E

Varnish without lampblack

175 grams

17½ grams China Clay

15 grams Castor oil

1374 E

Hoffman

Make a 50 blank batch

~~6 wood 3 China clay 1 Rosin~~

Make only 6 blanks save the
balance of the powder

Send 6 up to be varnished &
baked regular - One to be
varnished & other 5 sent to Edison
If the first 6 are nearly all
good send up what you get
out of 6 made

1375 E

~~Dup of 1374 E
Except 3 wood 4 China Clay
+ 1 Resin —~~

1376E

Varnish - 175 grams -
20 grams of Paramedoplenal Base

Varnish 6 percent

Fall of spots not filled - bubbles
too much paramedo
Am making one with
only 8 grams

1377E

Vannak - 175 grams -
20 ~~g~~ grams of Paraphenylenediamine

Var to percent.

Full holes due to bubbles in
Vannak - too much

Para - am making
one with only 8 grams

Quinacridone - 8 may be
good

1378E

Varinck 175 grams —
20 grams Hydroazobenzol.

Var 6 — print 1

Surface occurs louder than
Reg — smooth side
shows lots yellow spots
as of bubbles under
Blank shows very bad
bubbles — too much
Hydrazo

1349-

Long long ago horrible
Conchels - small shell
shows the pits seen ⁱⁿ
the working moulds in
Clanays room some days
ago -

Flora Bella good surface

{ of 358. inspected 93.3 OK -

{ Second lot of 571 88.1% OK

total 929 - 90.1% OK,

~~Met 6~~
Beet 53 of discards was
pulled out in Old tubs - 2

1379E

Make a Dryer full too.

Regular powder except One
& two tenths parts of Shellina

I think from the fine surface
on our blenders that our regular
mix is too dry - That our
Condenser works better &
dries powder too much &
it needs more due

Send up & have special
report made on this
lot. Send 1/2 doz seconds
to Exon

6 printed all OK mechanically
surface reg. Conchels depend
on state of moulds

1380 E

ground 96% then 1 lb powder
tears apart in strike off -
backs form in small pieces
shows lifts when rubber pad rises
3/16 Strike off

Leaves moulds frosted &
dusty 32 made

22 pull outs all desecr'd
If pull outs got rid of wound
be OK

printed 10 - 1 broken

Run from about like
Reg -

This is PROMISING

if can stop sticking "Tanning Solution"
9 propose diluting Condensate 100
times with alcohol paint 1 lb &
bat moulding 5 min then make
blank

1380 E

Make enough powder
50 blanks -

28 1/2 wood
21 1/2 Chalk -

6 lbs Rosin - 10% Fin
27 lbs Alcohol

Make them all up into
blanks

20 g. stannous chloride per gallon dust alcohol
used to wash copper moulds stops sticking,
absolutely.

100 g. stannous chloride per gallon dust alcohol
used as wash on powder blanks moulds
stops sticking on blanks absolutely.

1381-

Printed 3 on Reg Moulds
Surfaces not very good
as fine snags so numerous
on moulds they coalesce into
grit surface & make it
lousier -

Made 4 prints 12/5/16
reinspects 1/29/17.
4 prints all OK. 3 Blanks OK.

1381 E

Printed 12-8-16

Var 175 grains
10 grains finely powdered
Residual of lead -

Much softer than Reg.
Blank is a phenomenon, its
beautifully shiny glassy surface
scarcely a piece shows & that, our
spot, its absolutely continuous
like and transparent blank.
This is Very PROMISING

FINE

1382 E

Vannuchi

175 grams -

8 grams China Clay

Var 6 permt 1

Little more scratch

than Rag - has more

Conchoidal - Smooth sides

however is pretty good

than Rag

Blank very Clotty +

dull like Rag

1383 F

Vermish

175 grams

6 grams China clay

Var 6 - percent 1

Blank looks different
from others. Var appears as if
it had all gone in the blank

Thinks scratch is little more
than Reg - It don't seem as
loud as Reg.

1384 $\frac{1}{2}$ K

Varnish

175 grams

$\frac{1}{2}$ gram Smiths

Lump black

Var to permit 1

Blacks look shiny all over
but not near as good as
1361 for surface, more depressions
& flats now within but its next
to 1381 in looks

Very good surface, soft
only few cracks - much lower
valleys to surface

This is getting near to what is
wanted VERY PROMISING

1384E

Varnish

175 grams

8 grams Parametaphenyl Base

~~1~~ Varnish to percent 1

This gives a better surface
than the regular, less of it
is softer — both on test
mould —

There is something
in this —



OKS

1385F

Varnish

175 grams

8 grams

Paraphenylenediamine

Var 6 percent

Not as good as 1384-
but about same as Reg

1386 F

Vacuum

175 grams

8 grams Hydroxybenzyl

Not quite as good as
1384 but better than

Reg -

Both 1384 + 6 on 2nd time after
make enormous reduction
in general surface

1387 E

Yan

175 grams —

8 grams of very finely
powdered all thru 150 mesh

Chloride of Ammonia

Cuts —

Rotten face
holes — don't
fill rough spots
nearly flush with
shiny surface
NG

1388 E

Var

145 grams

16 grams of Champso

General surface soft - good

VERY Promising -

Blank - shiny at start with
shrunken places - as you
go in Var draws in to
globules - This is bad

The surface is apparently
better than 1381 but I fear
the surface will not set even

See Book 20 for
Continuation of tests

Square Edge Plates

Date	Conv.	Perfct.	Remains	Amount (Average)	
				(Amount)	(Perfct.)
14	87.9	85.	20	92.6	80.
16	88.7	77.5	20	91.9	80.
17	95.	87.	20	92.	80.2
18	97.5	97.	20	92.2	80.8
19	97.9	92.4	20	92.3	81.1
20	92.7	76.	20	92.4	81.
21	90.4	77.5	20	92.2	83.2
23	95.7	95.4	20	92.5	81.3
24	87.9	67.5	20	92.4	80.9
25	87.9	71.6	20	92.2	78.8
26	84.5	73.3	20	92.2	78.6
27	85.4	67.5	20	92.	78.3

Round Edge Plates

Date	Conv.	Perfct.	Remains	Amount (Average)	
				(Amount)	(Perfct.)
14	98.7	97.5	20	87.4	76.8
16	89.1	84.1	20	87.5	77.1
17	92.4	89.1	20	87.6	77.5
18	97.5	15.	20	88.	78.1
19	95.8	92.1	20	88.2	78.5
20	56.6	50.4	20	87.2	77.6
21	50.	63.7	20	87.7	79.6
23	82.5	77.	20	86.9	77.2
24	77.5	68.7	20	86.6	76.9
25	93.3	90.4	20	86.8	77.3
26	81.	80.8	20	86.8	77.4
27	93.7	90.8	20	87.2	

Logan Elder Burials

Squad No. 121				(Annual Average)				
Date	Born	Passed	Graves	Born	Passed			
Sept 13	95	85	3	20	95	85	3	
14	87	61		20	91	4	73	1
15	88	69	1	20	90	5	71	5
16	88	54	1	20	90	1	67	3
17	83	60	4	20	88	7	65	9
20	93	83	3	20	89	5	68	8
21	91	76	4	20	89	7	71	3
22	77	74	1	20	89	7	71	7
23	96	80		20	90	3	70	6
25	97	93		20	91	15	74	6
26	95	88	7	20	91	4	75	9
27	89	86	6	20	91	1	76	8
28	82	71		20	90	3	75	5
29	94	83	3	20	90	5	72	5
30	91	72		20	90	8	76	5
Oct 2	97	94		20	91	3	76	2
3	96	92		20	91	5	77	3
4	95	92		20	92		78	1
5	96	96		19	92	2	78	9
6	86	75		19	92	1	80	
7	93	83	3	20	92	5	80	3
9	94	62	9	20	91	6	80	4
10	96	93	3	20	91	7	79	6
11	84	72		20	91	9	80	2
12	90	66	2	20	91	9	79	6
13	99	95	4	20	98	3	80	3

Burial Elder

Date	Born.	Passed.	Graves	(Also buried in Graves)	
Sept 13	90. 8	73. 3	20	92. 8	73. 3
14	87.	72. 9	20	88. 9	71. 1
15	75. 4	55. 4	20	84. 4	70. 5
16	76.	64. 5	20	84. 8	69. 0
17	90. 8	72.	20	86.	71. 6
20	99.	91. 6	20	88. 1	74. 9
21	96.	91.	20	89. 3	77. 2
22	98. 3	92. 9	20	90. 4	77. 7
23	82.	66.	20	89. 4	75. 2
25	72. 4	43. 3	20	87. 5	74. 2
26	93.	90. 4	20	88. 7	75. 7
27	92. 4	77.	20	88. 4	76. 6
28	75	49. 5	20	87. 4	76. 6
29	69. 5	48.	20	86.	75. 7
30	87.	72. 4	20	86. 1	75. 2
Oct 2	77. 4	55.	20	86. 3	71. 5
3	97. 9	93. 7	20	87. 2	72. 7
4	97. 8	82.	20	87. 6	74.
5	88. 3	72. 1	20	87. 9	74. 3
6	60.	46. 6	20	87.	73. 4
7	85.	83. 3	20	86. 6	73. 9
9	66. 6	53. 3	20	86. 5	74. 3
10	96. 6	95. 8	20	85. 7	73. 4
11	94. 5	93. 4	20	86. 1	74. 3
12	97.	95. 4	20	86. 6	71. 5
13	97. 9	97. 5	20	87.	76.

Lehnt an Blanches Tisch stiele

1874		1875	
13	14 209	14	20 470
14	14 282	16	21 276
15	14 286	17	22 208
16	9 554	18	22 635
18	14 286	19	
19	14 286		
20	14 286		
21	13 445		
22	20 408		
23	14 877		
24	17 262		
25	20 423		
26	17 242		
27	14 209		
28	18 523		
29	17 445		
30	50 416		
31	20 047		
32	20 119		
33	19 425		
34	19 536		
35	19 403		
36	18 966		
37	20 770		
38	21 112		
39	20 937		
40	20 276		

Records to Bolivia

Sept		Oct	
12.	13188	13	16384
13.	11994	14	8894
14.	15045	16	16372
15.	11831	17	17030
16	8075	18	17185
18	18351	19	16022
19	13135	20	14856
20	13131	21	8706
21	14579	23	14224
22	15153	24	13587
23	7913	25	13579
25	15240	26	15596
26	15714	27	14934
27	16078	28	8170
28	16551	30	12171
29	14901	31	15183
30	9488	Nov	
Oct 2	16330	1	16214
3	14972	2	12609
4	15834		
5	15856		
6	17136		
7	12343		
9	17133		
10	17016		
11	17034		
12	17048		

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 20
Notebook N, N-16-11-30

This notebook was used by Edison during the period November 1916-March 1917 for notes on experiments to improve the surface quality of disc records. There are also notes by William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters. The entries describe a sequence of experiments numbered from 1389E through 1471E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients, including rosin, wood flour, various metallic "resonates," china clay, and a white clay provided by Charles Edison. Some tests involve variations in varnish preparations, their method of application, and the molding processes involved in disc record manufacture. Flaws and successful results are both noted. The first entry is dated "Thanksgiving Day—1916 Nov." Several entries indicate that Edison was "deaf today" and temporarily unable to judge test records for surface noise. Some notes are in the form of instructions to Dinwiddie, Hoffman, or other employees. In one entry Edison scolds his two assistants, complaining that "this kind of exptg is d-d poor." The front cover is labeled "Disc Records" and "20"; the back cover is marked "Records & Scratch." The pages are unnumbered. Approximately 120 pages have been used.

Thanksgiving Day - 1916 Nov

Varnished reg blank Reg 1 Coat Reg
brush reg coat + bake used Reg
Var except Lampblack omitted + 12%
Kieselghur substituted. This on drying
gave light yellow surface. Surface
about like Reg Used a tunc discard
master turned down -

Same Reg Var Lampblack omitted -
This surface white no louder than -
Reg was sharper + more lustrous than
either Reg or Kieselghur

Same Var but China Clay substituted
for Lampblack - This blanked looked
black, it was more clotted than even
reg Lampblack although China
Clay in Var is not clotted,

The surprise of this Varnish was
that blank black, also rough surface
& yet record is even lower in Volume

than either Reg or Kieselghur and
very much softer. This appears
to be a very noticeable improvement.
There was 112% China Clay added
of the Narmish @ 100 Var 12 Clay

The viscosity of Var don't seem to
increase in either case of Kieselghur
or China Clay - both work well
with the brushy, ^{smooth} scraping with knife
gives long channels - Reg + Kiesel don't do it.

Kieselghur settles out in free menbers
of presumably China Clay, although
latter can't be seen -

From these Experiments it does there
is a chance to improve the surface
by finding the right filler - ^{if}
will now make a great number
using 10 15 + 20% or more filler

Made some Reg Var Using Lampblack
made on water cooled wheel (rotated)
made by Smith. This is very black
but by no clay made from City
gas - mixed it in Chapman's Pad

rotating mixer - This is perfectly
mixed, vacuumed section of a blank
dried shiny black not grey mottled
hazards surface like Ray Campbell
but a continuous fine glimmering
surface no hiccups or lumps.

This if dampblack is the thing
is perfect -

Get bottles Var in 4 cc chest
for use tomorrow at many
little and best 1000
shake up - & make 6 blanks

1501
Resinate Magnesia blank, small

5 Resinate Mg 12 cc alcohol -

use 20 wood
15 chalk -

This dampens up ok. & stir together

Finest phosphate Very
fine smooth, appear to
be crystals of mica former
leaflets This should be
good -

Starch is round transparent
particles very fine $\frac{1}{2}/1000$
soft to touch -

Zinc phosphate Very fine
flat leaflet, feels like graphite -

ZnO Very fine smooth
not leaflets -

NO2 Resinate Magnesia

24 cc Alcohol

10 grms Resinate Magnesia

20 grms wood fibre

15 " Chalk

Think this has too much Resin
it lumps in drying some

This presses at 300 lbs equivalent
to Reg. Oil & it appears strong -

At 600 lbs on regular press

it is very hard & strong. Fed
Can't break it - shows in pieces
lumps of resin - badly mixed -

#1 at 600 lbs Can't be broken
either,

Mauria Copal (pale)

no 3

20 wood
15 chalk

Var. 12 cc alcohol
5 grams Copal -

Evidently the alcohol has
not been dried out of the
Resinoids of Magnesia + it
acts better than it will
when dried in vac dried.
I may want a little castor oil
to make it less brittle after
alcohol all gone, castor is sol
in alcohol

Took 40 grams Rosin,
Melted it Cooked off water
then added a little at a
time of Carbonate of
Magnesia - gas came
off showing Combination
finally when $1 \cdot 3 \frac{1}{2}$
one + $\frac{3}{10}$ of the grams -
grams was in the
Melting point suddenly
rose + the whole went
solid + dry looking
lumpy - It probably
Condenses the alkali

New gum in Market -

African Copal

Nice looking gum clear

Scheel & Co handle 8 cents
lbs plentiful -

Insol Alcohol

on hot plate soon melt
softens to a tough rubbery
substance, like old
Zanzibar Copal -

acting Calpholically - to
change the free fatty
to a certain extent

sufficient to raise
to BP tremendously
& condenses just like
Shellac & Linseed

when heated very
hot, =

It has no sticky properties
is harder & stronger than
Rosin & is Sol in
Alcohol This is

OK for disc blanks
in place of Shellac

1389 E

Var

145 grams

15 grams Naphthalene

Low sharp Cracks

ng

1390 F

Vari

May be affected by
alcohol
of ~~the~~ ^{clearing}
tent.

175 grams -

10 grams Phenol.

Fair surface, but much
after than Reg tried right after
same turned below window -
Surface only 60% in condition
of Reg -

Blank shiny all over
like 1381 but wavy hills.
considerable specis -

In places globular & draws
together exposing blank -
This is 2nd best of 1381
+ promising

1391 =

Acts like Reg

1391 E

Hoffman

Enough powder for 50
Blanks - Make only 6 -
Varnish Reg + paint 1
Keep balance ^{of} powder

28 $\frac{1}{2}$ lbs Powder

21 $\frac{1}{2}$ lbs Chalk

8 lbs of Resinate Consisting
of 12 lbs Resin 1 $\frac{1}{2}$ lbs
Magnesia Oxide - Went
also

1392E

Dumoulin took a good
working model put #6
into around Edge & presented
21. first record was about
regular surface with considerable
Cracks -

21st Records about same could not
say it was any worse
on other surface (2nd way round)
found only one of the radial
inward with normal trail
→

1393 E.

Vannich

175 grams

8 grams Chalk

Var 6 print 1

Not as sharp as Reg

13942

Varnish -

175

8 gms Zinc Oxide

Var 6 pint 1

Like Reg - more cracks

Very bad looking surfaces

1395 E

Vermont -

175-

10 grams Carb (ead)

Var 6 percent 1

About same as Reg

1396E

Varnish

175

6 grams starch

Test 6 percent 1

Settles out just a little.

No better than soap

1397E

Varnish -

175 grms

8 Epsom Strontium Chloride

Settles out a little,

Much softer than Rag - This is
PROMISING - blank dull
Very Clotty - Clots if get out
might impress it.

1398 =

I printed another blank
it had lots Cracks -
find these are due to
white soft spots - also
found lots of small
holes as if pulled out
or lack of varnish to fill.
Trouble is want of
finer -

1398E

Varnish

175

8 green short time flecks

Var 6 percent 1

Settles out very little.

Very soft **VERY PROMISING**

Much less than 1397 - 3 times over
no Cert Blank peculiar
note lots of pure white spots
as if on top of a bubble
probably should be finer -

Whole thing dragg
lots larger numerous

1399 E

Varnish -

175 grams -

8 grams Phosphate Copper

Var to permit 1

Settles out Var 13ad,

A little better than old black
Ray notes good as Ray test
would on black. These
tests made on -

1400 E

Varnish—

175 grams

& grams Mag Carbonate

Var 6 percent 1

Mag Carb settles out of
Varnish

~~Shale~~ Shale better than old
Blank Reg about same as
new Blank Reg—
Blank side Pretty good—

Cumoris— Blank dull grey even
matter— no Clots Varnish apparently
all gone in—

1401 E

Vermont

175 grams

8 grams Strontia phosphate

Var 6 - plant 1

fairly soft - both sides

PROMISING

1402 E

Vermish

175 grains -

8 grains

Ferrocyanide of Zinc

Vermish 6 percent 1

fair on music side, very
soft + weak surface on
blank side -

Blank shiny but lots
of clots -

PROMISING

1403 E PHENOMENON

Make up powder only

25 $\frac{1}{2}$ Lbs Powder

21 $\frac{1}{2}$ " Chalk

use reg lamp black in blank

Varnish

6 Lbs Resin

30 lbs Alcohol

Made 8 blanks - using Sesame oil
on mounds, rag wet with it
rubbed over & then wiped off -

all OK - Printed the 8

all OK - This shows Resin
OK & no sticking to mounds
of sesame used -
good WW Resin used

1404 E

Var

175

15. Very finely
powdered. Resinate of lead
through 190 mesh
Var 6 front 1

Don't settle out at all

Run out both sides
Specs - not good -
surface fair - too much
lead,

Am making a Coen test

Reinspects 1/29/16.

1 print d. Ok. 4 Blks Ok. 1 old Blk.

1405 E Made 12/8/16

Var 175

6 grams finely
powdered Resonance of
Lead Through 190 mesh
Var 6 percent 1

Don't settle out of Var at all
Smoother than Rag, ^{smooth} Head side soft
3 times over Light Cast. Blank
Very shiny continuous Varnish
only scattered Clots Very
PROMISING

1406 E

Varnish

175 grams

15 gram Tungstate of Calcium

Varnish 6 percent 1

1407 E

Varnish

175 grams

8 " Stearic Magnesia

Press all thing, Var looks awful
Cuts NG

1408 E

Vermont

175 grams

8 " Zinc Oxide

Record full chicks - Ranch

NG

1409 E

Yarnish

175 grams

18 grams Stearate Calcium

Very Rough - don't fill
Cuts - white specs all
there - powder too
Coarse N9 -

1410 E

Varnish

175 grams

8 grams Stearic Barium

Recond Very full of Cheeks
Horrible n9

1411 E

Varnish -

175 grams -

8 grams Stearate Alumina

Records Cuts - full check

Very bad horrible

1412 E

Hoffman

Make up enough powder
for 10 blanks -

2 wood

1 Cotton

4 Chalk -

Make up the blanks & let me
see them -

1413 = Have 47 OK + only
5 Discards - PD near center hole

Hoffman says - ground wood fiber a
flock together before mixing
then mixed seg - ground 98% thru 150
Pawder seems to tear when struck
off by loader - packs good in
small pieces - powder tears on
strike off on turn table -
leaves moulds good & clean
95.6 OK -

The flock fibers under micro seem
very long -

1413E

Not so good as 1413
surface not as good -
Dropped 20 turns -
12/11/16

Make 20 blanks -

2 wood

1 flock

4 chalk -

1 lac

+ Experiment to get
right thickness of
blank - let me see
them -

This makes a beautiful
blank very even fine surface
The flock is the predominant fiber
no sign of a pull out. Ideal
It's tough & thick second will
be very strong

1414 E

~~Hoffman is duplicating
with 1000 records
the 1.2 Shellac
Regt~~

1415E

Varnish -

175 gms -

8 grams Tungstale Calcium

fred its on big pic plate on
my bench -

Recond soft - good -

PROMISING

Blank - no Cavities like Rag - but its
~~the~~ full of ~~shards~~ ~~clots~~ all about
same size -

Should make a lot of Tungstale
to get a fine precipitate,

1416 - Hoffman says

Ground 98% (win 180. Picks light
in moulds, powder tears when
struck off by loader
Picks firm in small pieces
3/4 strike off -
Trans on strike off at turn
table leaves moulds cloudy
but clear -

Has nice surface -

Too thick

Caliper 322 High 313 Low

Weight 600 gms

will try a smaller mould

1416E

Hoffman

Not so good as 1417
Surface not so
good as 1417
Dropped 14 turns

Make up enough powder
for 10 Blanks

- 1 Wood Not
- 1 flock
- 5 Chalk
- 1 Lac

Make up a blank +
show to me

1417 Look fine surface fine grain - some wood got in wet about same as bag perhaps little faster - Swells up Cuts tough - apparently plenty of fibers the give toughness

Looks Very promising
More lac would make it better think its too dry

Too Thick -

Caliper 308 high 280 low
will try thinner mould

Weight 551 gms

Printed 11 Every one of the faces of the blank stick to moulds terrible job - no strength to surface Must have more lac also probably more flock -

1417 E - Printed 1 - China Vase -
no mottle very fine surface

This is the right direction to
Experiment - Surface weak
tends to stick to mould

Came off OK after 10 minutes cooling -
Made 12 drops of strong enough

Make up enough powder
for 10 Blanks -

1 flock
6 Chalk
1 lac

make up one blank

Hoffman reports - ground 97%
finer 180

loads heavy in moulds powder
leaves when struck off by loader
Picks from in small pieces press
tears on strike off at turn table
1/4 stroke off - leaves mould
cloudy but clear -

Resinate of head ground up most
with alcohol - very fine -

Rubbing on finger as it dries
is sticky showing alcohol
dissolves some of Excess Resin

It appears to be soluble in
hot alcohol but even then appears
slow but when Cask knows
most of it off - usual -

There may have something to
do with peculiar action on
a Varnish.

However it may be it makes particles
transparent to certain extent -

Reinspected Jan 29, 1917

Print OK 3 Blks OK

1418 E

Made 12/13/16

Caul of Resinate Head
Varnish 175 grms Varn
to 8 grms Resinate Head

This is for Varnishing

1412 1413.

1418 sent up a small bottle to Varnish 6
4 pint one - This was Filtered
There one thickness down - some left
on used 100 filler small cap
it closed up had to do it in 2 doses
fills works OK Can use say
10 Resinate allowing 2 for loss
getting 8.

The Big lot of 1418 will not be
filtered -

1419

I varnished $\frac{3}{4}$ of a Reg
blank with boiled linseed oil
let it stand for 5 days
The unvarnished part took
water in twice as quick
as varnished part,
some places 3 times faster
where it happened more
dressed on -

This may be Useful

Dec 12/16

Charles Dawson gave me a
sample of a hard lumpy
white clay? found in
unlimited quantities
Owned by a friend of
his -

Put in water it swells
up to a transparent
jelly. its fineness is unlimited
not attacked by HCl -

Has opals in it possibly
confront with spec very
fine - This clay? acts
strange - its the limit of fineness
looks and acts like butter -
POSSIBLY USEFUL

1470E

Print 1, from the head bar blank
filleded lining with Otto B -
Nickel plated -

One side came free but the
other side (nickel) didn't
probably because nickel
peeled produced moments
as we saw in micro -

Noticed vacuum equipment
set in one place

1421 E

Take this 1418 blank +
Varnish it again with
1418 Varnish -

print on ~~S~~ P Otto
Michel played mowed

1422E

Record OK mechanically

This has a more quiet surface

than 1423

5 ft drop broke 3rd drop

Varnish (Reg) looks better
than on Reg blank - the
even cut of corners & clay

Print stuck to mould but got it
off - Cracked ~~but~~ in 2 or 3 places

but surface is good, some cracks

While surface is very good, have heard
with this Varnish & lost mould

~~not~~ just as good with

Reg blank

This blank fails as surface of blank
not coherent enough to permit pouring

1422E

Hoffman

Make Enough powder for
30 blanks (about) 6 chalk

1 flock 1.2 of Rosin

There should be 5 of alcohol
to 1 Rosin - use rosin on
mould

Make up 6 blanks -

Print one on a prepared
working mould

Reg or

possibly $1\frac{1}{2}$ or $1\frac{3}{4}$ ~~blanks~~
Rosin mixed, cure it,

Hoffman says never be able to
separate it or use Newage process as it
would cut all the flock out,
Thinks would need person use
it direct from Mill.

Recessed in 180° Random in 180°
97 1/4 New form 180° Random in 180°
Recessed in 180° Random in 180°
Recessed in 180° Random in 180°

1423 E

Record OK - ^{mechanically} of course its a
discarded ~~full~~ & full snaps
will now have good names
used & print another -

Not so quiet genl as 1422 E

5ft drop - broke 11th drop -

Varnish looks better than
on Reg - of course its

Chety - 12 printed 100%

PO - 1 side 1
PO both 2

1 Vener PO



Cuts soft dont seem to be
Enough Resin

1423 E

flock seems to pulled up even with
powder - 97% fine - 6 made 100%
leaves mouth clean, does not wash

Hoffman

Mix powder for about
30 blanks,

1 1/2 flock 5/2 Chalk

1.2 Resin -

1 of Resin to 5 of Alcohol

Use sesame

Make 6 blanks - print one
on a Discard Model

Reg Vor

1424 E

edge of blank -
mould -

Pair of Moulds with ridge raised around
edge to prevent injury from blank -
Ridge about 1020 high & wide -
116 prints made 89-11 Dec. 16 - gave 77.5%
OK

Note - tested a large
number of chemicals to
coat moulds to prevent
Rosin sticking -
following are OK

Paraffine oil
Sesame
Olive
Albany grease

Monochlorophenol

Paraffine preferable as
can get it pure -

1425 E

Make up dozen Rosin
blink - 1380 E

Using Paraffine oil on the
moulds -

Varnish 12 print them
all on Reg Moulds &
send to Edison

12 Printed Printed % 100
Inspected =

One fine crack radial to union
PO label on both sides 3
PO " one side 4

The only trouble with 12

1426E

12/15/16

Dup of 1425

Except Varnish with
the Special Varnish
from Fred Ott.

1418

Painting 100%

Inspection

Reinspected Jan 29, 1917.

Paint OK.

Inspected Jan 29, 1917

- 4 Printed all discards
- 2 Tested pull Out on label.
- 1 Tested on label
- 1 Checked Blank.

1427E

12/16/1916

Make up 12 of the 1380 Robin
blank, using Sesame -

Varnish⁶ & print 5 on the
new test moulds - the
original & the last
test moulds -


8 Blanks made 6 ok 2 discards
1 feather Pull Out 1 mechanical
Sesame

✓ Elen - This surface is just
as soft on Rag Varnish
on feed rollers Varnish -
This is extremely good soft
surface -

Probably be very little complaint

Except on very quiet records

I noticed that one time had
such quiet tracking all I could
do to hear where the opposite
tracking was very noticeable

There were 2 or 3 mechanical
defects - Var pulled ~~out~~ at
Edge probably due to ring
+ a Crack  there

With ~~check~~ Revin mix req 4 Feb
3 loads + this Varush
Thru it would be satisfactory
if working mould ~~out~~ back
is OK

PHENOMENON

1428 F

Dep of 1427

Except Varush ⁶ with
Fred Otto Var 1418 F

+ Print all the test
moulds on them

8 Blanks made 2 Pull auto
6 OK - Resam

Parafin oil probably works
better

The surfaces on these
records are very good
+ about satisfactory
if you ~~could~~ mould there would

1429 Theek on show drift
Pull wires —

1429 E

Hoffman Make

30 or 40 Blanks —

3 Wood 4 Chalk

1.2 Resin —

4 of alcohol to 1 of Resin

Use ~~seasoning~~ paraffine oil

& Report when ready

& 4/5

Don't mould good oleate

to mould — blanks Crack

94% fine — 4 times more Will —

7/8 mould rough strikes off at both
places 3/16 5/16 off

12 made 1 pull out 6 Cracked

5 OK

41.6%

1430 E

Hoffman Make a dozen
blanks or more

$1\frac{1}{2}$ flock

$5\frac{1}{2}$ Chalk

$2\frac{1}{4}$ Rosin -

Alcohol 4 times the amount
of Rosin -- Paraffine Oil -

Send 6 up stairs to be
varnished Reg. one printed
on ~~disc~~ card mould -
Keep the other 6

Notice - Too sticky when
hot in Fuller Mills
abandoned experiment

1431 E

Drop test

1	3	times -
1	4	"
1	4	"
1	2	"

Two thick - waxes

Reg size + .7 Rosin -

One time turned down marks

is Very Very soft & weak gentle
& perfectly satisfactory
the cotton side is hard
always - to not the
blank -

1431 E

Blanks are too
Hoffman thick - waxes
7/8 moved

Make few blanks -

like 1380 E except make
the fibers 3 + the chalk

4 -

Varnish to print one
on test mould -

Hoffman Report - ground 3 times
to get 91% then 100 - Paraffin gel
used on rollers' leads good
strikes off clean leaves marks
slightly frosted but clean -
6 make all ok

Printed 6 - 1 blank cracked
2 po in labels cotton ok -

Drop test

1	20-	break then -
2	3	
3	3	
4	8	

1 was cracked up stairs
in permining +

Think could make
this OK by Experimenting

Kucher said
Resonds @ Truck
hard to mould
guess 4 wood 3 chalk .6 Resin
is what we must stick
to —

1432 F

Huffman

Make same blanks

3 wood 4 Chalk. 8/10 of

Resin - + use a 7/8

mould, - 4 alcohol to 1 Resin

Make 6 ~~of each~~

Print all on Reg Moulds

Huffman Report Moulds coated
Mylar - wiped off lightly with clean
rag & hand rag - Moulds nice
peaks from 7/8 mould
Calliper 204 223 214 - 208 -
1/8 stroke off - no tear on stroke off
leaves moulds clean - best
frosted in spots J -
5 OK one cracked

1380E Resin .6 - print

had a second in oven at
125° Fels 3 hours -

one side developed a
Rout - otherwise OK
but 9 images present
Dutfor - otherwise
Record OK no warps
alteration of appearance

1433 E

Huffman -

Make a few blanks -
All fibre no chalk
use 7 fibre 1 lac

Send up stairs 6,
Narrowish 6 - print 1
on test mound

Deaf today - test when
ears are OK

Tried it again - stuck fast
to Mould

1434E

2 Blank - with Rubber Dope
thinned by Benzol rubbed
over dried -

to be varnished one
the Dope side & not on
the other - Print

Varnished side on
test mould & unvarnished
side on a Discard
mould

The first attempt, Vener all
pick off blank & mould
stick - This isn't
promising

More on it will be necessary
to use almost undisturbed dope
in any event its PROMISING
if it softens Sarah,.

1435 E

One side of 2 blanks
Varnished with $\frac{1}{2}$
thinned down film
Cooper
dope dried - Varnish
Dope side & permit on
test mould print
unvarnished side on
a discarded mould

This works OK, Surface seems good
the eye inspection all OK - ^{about} 020 pull
and when finished -
This Dope can probably be put on
much thicker, I put it on very
roughly by hand, the 9st.

1436 E

Kircher - Reg

Take 6, blanks Varnish with
Varnish having no lamp black -
Don't bake, just dry couple hours
then Varnish again with.
188 E Varnish made by Fred Ott,
Send for it Tuesday

Can't test Deaf now - Save -
will print 3 more & save on
Var blank -

Miller says they have very
quiet surface. It don't
seem so to me while I am
deaf - There is in fact
one printed & snaps 2 on a
side both Varnish defects
fine pull out - there is
bad -

1437 E

2 blanks coated
thick Cooper film dope 1 side -

One of these is to be

Varnished Reg & printed
on one side - with test mound

The other is to be printed
direct without Varnishing
on a desiccated mound

The one printed direct on the
dope is no better probably
louder than the side
with nothing on -

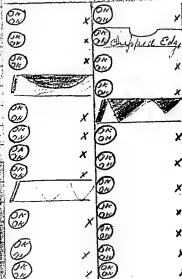
The other with Varnish over,
listen when not Deaf
Miller says here sure good

1438E.

This is discard mould
with ring around edge
010 & 3 tits 40/1000
looks good -

Make some good moulds
with this on & run reg
Ravensbury 2000th &
Note defects & % of
all -

1439-E



83% 91%

83% 83%

1439-E

Make 1 Ring on all
 Dupont or old World Blanked
 regular every. Gas & fuel
 regular every
 & Blanked to be printed on
 Mr. Edison Test Machine
 delivers a round to Manual (Horn)

1440-E

1/10/4

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

ON
ON

x

83%

25%

1440-E

Make Record of Banded
on highly polished ...
Last time record very
Print 1 on 1/2 ...
Horn, divide all to ...
Round. Ridge 4

World's great, large ...
show

1/25/16

1441-E Dup. of 1440-E

Only difference is 9 marks
have been crossed with 15 solutions

Was 4 print regular

Print 1 round 4 and 6

Bldg # 4

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

100%

100%

1442 E

Vamished with NC maguato.
made by Hoffmann & filtered by
Edison in small vacuum filter
filtered too slow & filtered out
too much stuff should say
 $\frac{1}{3}$ filtered out very shiny & good
& blank net with stand by

Will print the 6 made,

1443-E

Garnish & take
Regular way 6 blanks,
send to Mullis to show
Mr Edison

1444-E

Varnish with Lead Pigment
supposed to have been used in
previous experiment 1357-E

Now & Bake 6 Blanks
regular way print 1 in Specie
that would send to Bldg #4
for Mr. Edison.

1445-E

Resinate of lead free ferro
Resins. Put through fine grinding
grind mill with alcohol. then
Alcohol filtered off on. Two filters
Resinate not allowed to dry. filtered
O.K. through two thickness of linen
Tarnish & Bake 6 Blanches
Regulars every Print on Special
Test Mould. send to Bldg &
for Mr. Edison

1446-E

Resonate of Lead free,
from resin that had been dissolved.
Pre-wet with alcohol then filtered
to get rid of alcohol. cake not
allowed to dry. then put in
oven with a little Sulphur to
work up the cake - filtered OK.

Varnish & Bake & Bleaches
Regular way, print 1 on Special
Test Mottle send to Bldg 4
for New Editions

1447-E

Wade Bloomer of Lad.
crashed on filter with water then
partly crashed with Alcohol, and filter
then give one wash in 10%
ethanol, resin filter in Alcohol then
take 10 g. ground up particles and
a little gasoline to work out lumps
then put in 100 cc. 10% resin, 10%
filter OK.

Winnif 4, Blake 6 blanks regular
every print 100 Special Test
Mord for Mr. Edson and to
Bldg 4

1448-E Duplicate of 1447-E

Except two treatments with
Alcohol to extract resins. (No. 1447+)
1448 to much change for notes
also to much alcohol required.

Vanilla & Bala & Blauha regular
away from 1 on Special Cat
Mould for 2 mg. Olson
Send to B. 4

1449-E *Species Primitia Schindler.*

98.7% OK put 1308 #1447
92.9% no blower.

Endow Hill Monday 2/19/17
for time that 10 am

But from this one would
infer Chino Varnish was
a Bad failure - It may be

But

This kind of Egypt is a-d poor
one lot of moulds very good
the other lot poor and

to ascertain anything both
should have been presented
with same moulds about same time

1450-E.

M. Hoffman:

Please make one drive
full of powder in which $\frac{1}{10}$ of
the shellac is replaced by
Resin.

Blowers are to go thru
special and record kept of discs

12 prints to go to Miller to
be marked on labels permanently
and put away to see if they
deteriorate.

2 prints for hot and cold
test.

put 12 on top of Cupboard, also same
Smith is coming up for a lot of
Chino Varn

The surfaces a very bad

Run with also -

E

The other lot with Regular
Varnish has good surface -

- 1) 310 - 201 - .009
- 2) 202 - 197 - .005
- 3) 309 - 199 - .010
- 4) 215 - 203 - .013
- 5) 197 - 190 - .007
- 6) 194 - 197 - .007
- 7) 202 - 188 - .014
- 8) 211 - 207 - .004
- 9) 209 - 206 - .003
- 10) 224 - 214 - .010
- 11) 202 - 198 - .004
- 12) 221 - 211 - .010
- 13) 201 - 184 - .017
- 14) 195 - 182 - .006
- 15) 214 - 197 - .017
- 16) 205 - 194 - .011
- 17) 199 - 169 - .030
- 18) 217 - 204 - .013
- 19) 206 - 198 - .008
- 20) 198 - 191 - .007
- 21) 207 - 196 - .011
- 22) 218 - 210 - .008
- 23) 195 - 185 - .010
- 24) 210 - 191 - .019
- 25) 209 - 204 - .005
- 26) 220 - 209 - .011
- 27) 219 - 210 - .009

- 28) 195 - 188 - .007
- 29) 210 - 187 - .023
- 30) 210 - 204 - .006
- 31) 206 - 200 - .006

1451-E

Make some blanks
everything req. except, use
App. sample of ^{best} wood
wood extract of Norway wood.

This Experiment is for Caliper
Measurements on Blanks.

1452-E Duplicate of 1448-E except
filtered through thickness of linen

Now & take 6 Regular Heavy
Print, on Special Model for
Mr Edison send to Blt^g 4

1453-E

Made spirit resin extracted
from Resonate, & had solvent loss
gives good results - this resin
contains some base

6 grams resin

175 " " Varnish

Varnish + base & blushed regular
way.

Print 1 on Special Test Material
for Mr. Edson
Send to Bldg 4

1454-E

Made with using extracts
from lately made distillate of bark
6 grams of Resin
175 " Camphor

Has a Taste - bluish - Resinous

very

Prep. 1 on Special Test Material

for Mr. Edwards

Send to Collig. 4

1455-E

Resonance of lead made with
40 g. No OH at 20 B.
40 g. Stains + lead nitrate, sol.
Hard filtering had to change liners
twice

Was + Bahr 6 blocks regular way.

Print 100 Special Test Mould for
Mr. Schoen
send to Bldg 4

1456-E

Resonate of Lead.

409. May OH at 130 73.

806. Resonate of Lead. Sol.

Hard Yttrium Resonate of Lead not all
discarded.

Van & Bate 6 Bbls. required second

Unit 1, 015 Lead. Test 11.11.11.

Wm. Edwards

send to Old 4

1457-E

Recomat of Lind on alk with
409 NaOH at 20 73s
30g. Pours + Nitrate of acid Sol
Hard to write had to change letters
Van + Baku 6 (Blind) needed 10g
Print 1 on Special Test Mammals
New Edition
Send to Bldg 4

1458-E

Resonance of hand made with
409 Wm. OH at 20 B
2561 p.p. 10 & back 7th rate vibrations
Hand following

Vary Base & (B.S.) regular series

Print, old Lucas Test Mon. for

7th Echom

Send to Blig 4

1459-E

Roommate of Lead made with
40.9 Wt. O₂ at 20. B.

2091 Approx Lead Nitrate Solution

Hand filtering

View Base 6 Bins regular every

Print 1 and Special Test Method

for Mr. Scherer
send to Blag 4

1460-E

Mar 2-17

One drier full of powder in which
5% of the Shellac is replaced by Resin
Behrns to go thru special and
record to be kept of discards

12 prints to go to miller to be marked
on labels, permanently and put away
to see if they deteriorate,

5 prints for hot and cold test,

92 4% Out of 979 Records. 3/2/17

1461-F Hallys #14

5 grams Resinate of Lead 175 grains
of Warrick without same about same

5 grams Resinate Lead
to 175 grains Warrick
filled three 1 thickness
fine linen & Coarse paper
on fine linen Can fill
faster —

Will start using
this Warrick
March 14/1917

1462 - Bally. Receipt of land n 33

5 acres Receipt of Land 175 acres of

Var. Very truly. Hand to rights

1463-E Slip of 1462 except 10 pages
of Resolute of page 10 175 given by
Hand to file

1464-E. *Quercus* & *Juniperus* 7th. 1880
of lead. H. G. on the 1st. 1880.

1465.F

9 grams Absorbent of Lead
1175 grams of German Soda ash
Lump black. Low melting, hard, brittle.

1466-E Dup of 1461-E

Expt made in long bar cells

Recount of lead

1468-E

1 Negro *Pezomachus* *Pezomachus*
with 10% of fine. Ground black.

No difference in surface -
from pairs 1468-E and irregular
prints from same moulds kept

92.5% OK out of 545 Records 9/1/17

1469-E

one dozen Regular powder
with 20% of fine ground blanks.

8 parts new

2 parts reground,

83.9% ok out of 490 Rec'd on 3/13/10

1470/E

March 13-17

about same as 1380-E Box 19

one dry full

40 lbs wood fibre

30 lbs chalk

10 lbs. G. G. Water White Rosins

30 lbs Alcohol -

req. ant clump black

use paraffine oil on outside
and wife dry.

Keep acc. of recent C. all items.

Make label test

Send 1/2 pint to Phillips in
Rebuilding (4)

1470-E about same as 1380-E 12/19

On drier full

40 lbs wood fibre

30 lbs chalk

10 lbs 6 oz water white resin

36 lbs alcohol -

reg. and lamp black

Use paraffin oil on moulds
and wipe dry.

Kappa acc of percent 211, all thru.

Make shear test

Send 12 prints to Miller in
Building 144

1470-E

Moulds washed, with
spring, solution. Radio passed.
No pin, always special ring. No
strike off. Have Moulds, others
Moulds 1261. Sawholes.

1634 Moulds

27 Built Out

7597 OK

98.3%

97.1% OK out 1400 Records

87.7% OK on Flouha

1470-E

57 lbs wood fibre.

43 lbs chalk -

2 lbs lamp black -

{ 12 lbs resin,

{ 50 lbs alcohol -

See 1380 E
Original
54 lbs alcohol

One drier full -

Use Paraffin oil on moulds
and wiper dry

Keep acc. of percent OK, all them
Make wear test.

Send 12 prints to Miller in
Building (4)

// Mould & Print Regular -
but make 24 blanks in ~~one~~
1261 schedule and keep separate.

Drop test

1 - 10 times

2 - 5 " "

3 - 2 " "

4 - 5 " "

5 - 15 " "

6 - 5 times

45 times

1471-F Dup of 1461-F Dup
made in a later Indian script
Remnant of Seal # 14

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 21
Notebook, N-17-04-11

This notebook was used by Edison, William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters during April-June 1917 for notes on efforts to produce a perfect disc record blank. The entries pertain primarily to a sequence of experiments numbered from 1472E through 1567E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients, along with "drop" tests intended to determine the durability of disc records by dropping them numerous times on the floor. Between experiments 1495 and 1496 is a summary by Dinwiddie of previous "Rosin Blank experiments," numbered from 1470 through 1486. Many of the entries are in the form of instructions by Edison or Dinwiddie describing the experimental records wanted, accompanied by evaluations of the test records produced. Flaws and successful results are both noted, along with comments on the durability and thickness of the records. One entry refers to the possible use of nickel plating (later adopted) on the face of the copper record molds. The last entry announces the "discovery of an important principle," which is pursued in Book No. 22: the powder in the rubber-packing press must be considered as a mixture of powder and air, and the air must somehow be eliminated. Inserted into the book is one note by Edison, as well as some calculations by an unidentified experimenter. The front cover is labeled "Disc Records" and "21"; the back cover is labeled "21." The pages are unnumbered. Approximately 150 pages have been used.

Knopf test on 1472-E

1 -	1
2 -	3
3 -	2
4 -	20
5 -	17
6 -	3
	<hr/> 45

Look after X 1495 for resume of Rosin
Plow experiments.

This lot made out of the cut off from
all previous 1472 experiments. Little better
than sweeping. all Rosin must
made morning after fire.

1472-E

57 lbs wood -
43 lbs chalk -
2 lbs lamp black -
15 lbs Rosin -
50 lbs denat. alcohol.

dry -

grind with equal quantity
of reground blanks.

Took this on even to

atmosphere when in use

Blind

more than distance

95.9% OK on 7986 Records.
95.9% OK on 620 Records
95.8% OK on 2360
91.2% 1464 Blows
68.3% OK out of 1562 Records
92.8% OK and Blows.

1473-E

98.1% OK out 979 Records

76.5% OK as Blanken.

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

98.1% OK

100%

100%

1473-E

57 lbs. on each side

43 lbs. on each side

13 lbs. on each side

50 lbs. on each side

One side only

Drop test

1 - 4 times

2 - 10 "

3 - 9 "

4 - 3 "

5 - 1 "

6 - 8 "

3 4 times

Worship with turning solution
Blades raised 1/2 in. before World
ring 1/2 in. strike off base Worshippers
chords

Worshipped 1261-E Schedule.

1308 Made

8 Pull Cuts

1300 OK 99.4% Blankets kept only.

1474E Dues L. 1000

Dues L. 1000

Viso 150

Blanks look shiny

1475 E

Chino Var

1 Cotton flock.

6 Chalk

1 Rosin -

$4\frac{1}{2}$ alcohol to 1 Rosin

{ $12\frac{1}{2}$ lbs cotton Flock -
75 lbs chalk -
2 lbs lamp black -
 $12\frac{1}{2}$ lbs Rosin -
 $56\frac{1}{4}$ lbs alcohol -

14766

Chino Var

1 Cotton flock

6 Chalk

1 $\frac{1}{4}$ Resin -

4 $\frac{1}{2}$ alcohol to 1 Resin

{ 12 $\frac{1}{2}$ lbs Cotton flock
75 lbs chalk -
2 lbs lamp black -
15 lbs ^{very} Resin
6 $\frac{1}{2}$ lbs alcohol.

Very Heavy
Black

II good

III good

II very fine one of question was heard

I don't remember

If moulds were all good
this black would be
best yet. seems to have
better like ^{than Ray} ~~some more~~

1477 E

1 Cotton flock

6 Chalk

$1\frac{1}{2}$ Rosin -

$4\frac{1}{2}$ alcohol to 1 Rosin

$\left\{ \begin{array}{l} 12\frac{1}{2} \text{ lbs Cotton flock} \\ 75 \text{ lbs Chalk} \\ 2 \text{ lbs lamp black} \\ 18\frac{3}{4} \text{ lbs Rosin} \\ 84 \text{ lbs } 6 \text{ oz Alcohol.} \end{array} \right.$

Blanching should precede after Yps.
& Baked. none printed all cradled.

1478-E

Take 5 hauls #1478-E
have the 5 hauls with Linnæa
Linnæa

Print three of them on 200
Regular 1000000 1000000
1 for the Eth. 1st Test March.

Save 1 Blank 1. 1000000
with them at 100-

glass shows matter, also having no
grooves to restrain. Blank flower
towards edge - shows check
surface not good not near as
good as a second on same
blank - Blank not
promising -

4/14/17

1479-E



x Drop test on 1479-E
 x 1 - 8 times
 x 3 - 30 "
 x 5 - 16 "
 x 4 - 15 "
 x 5 - 9 "
 x 6 - 10 "
 x 78 " "

x 1479-E 69.0. 5/3/17
 x 69.5% OK out of 3530 records
 x 82.3% OK out of 1126 records
 x 1479-EWG 5/4/17
 x 61.2% OK out of 1126 records
 x 84.2% OK on Blanks
 1479-E 69.0. 45.5% OK out of 547 Records
 70.5% OK on Blanks
 1479-E 69.0. 45.5% OK out of 547 Records
 70.5% OK on Blanks
 1479-E 69.0. 45.5% OK out of 547 Records
 70.5% OK on Blanks
 1479-E 69.0. 45.5% OK out of 547 Records
 70.5% OK on Blanks

91% 100%

91% 100%

1479-E-13 46.6% Records OK
 Blanks 73.8% OK.

4/24/17

1479-E-E 56.2% Records OK
 Blanks 87.3% OK.

4/25/17

1479-E

Drop of 1473-E
 except 75% Truro Records
 and 85% ground Records

57 lbs wood -
 43 lbs chalk -
 2 lbs lamp black -
 15 lbs Rosin -
 50 lbs denatured alcohol -

They and grind three points
 of this with one part of re-ground Blanks

96.3% OK out of 164 Records
 75.5% OK out of 164 Records
 Only 79% OK on Blanks

81.0 Records make with E
 Rosin only 76.7% OK

92.6% OK out of 737 Records
 92.6% OK on Blanks

1479-E W.B. 68.1% out of 301 Records
 1479-E 10 20.4% OK out of 1012 records 76.4% OK on Blanks
 1479-79Q 17.5% OK out of 357 records 72.3% on Blanks
 1479-75Q 34.7% OK out of 563 records 84.7% OK on Blanks

1481-E

4/12/97

PR	x	Drop test on 1481-E
PR	x	1 — 3 times
PR	x	2 — 3 " "
PR	x	3 — 5 " "
PR	x	4 — 4 " "
PR	x	5 — 3 " "
PR	x	6 — 3 " "
PR	x	2.0 " "

91%

91%

1481-E - 1261-E Schedule.

60 lbs wood
 40 lbs chalk -
 2 lbs lamp black -
 13 lbs rosin
50 lbs alcohol

After drying mix in grinder with
 25% of old regranulated blanks.

1 part old blanks
 3 parts above.

make one drier full

95.7% O.K. Out of

1275 Inspect
 17. Broken Records.

95.1% on Blanks.

1483-E

4/18/17

2A
 2B
 2C
 2D
 2E
 2F
 2G
 2H
 2I
 2J
 2K
 2L
 2M
 2N
 2O
 2P
 2Q
 2R
 2S
 2T
 2U
 2V
 2W
 2X
 2Y
 2Z

1. 5 turned
 2. 3
 3. 4
 4. 4
 5. 8
 6. 1
 25 times

100%

91%

1483-E

57" Wood
 43" chalk
 3" Lamp Rock
 13" Pozo
 50" Alcohol

After drying - surprise
 spindles with 10%
 old unground bluish

Mordred's quartz with traces
 of softening. Hades raised 1/2 in.
 above Mordred's being partly of
 streak off. Hades Mordred's class
 Mordred's 1261-E Schedule
 1521 Mordred

100% OK

97.7% OK out of 1123 Records

74.9% OK on Blanches.

1483-E

2A

x

1483-E

2A

x

1 - 5

2A

x

2 - 4

2A

x

3 - 6

2A

x

4 - 7

2A

x

5 - 11

2A

x

2A

x

2A

x

2A

x

2A

x

2A

x

100%

91%

1483-E

57 lbs.

Wood.

43 lbs.

chalk.

3 lbs.

Camp Glass.

14 lbs.

Gauge.

50 lbs.

Alcohol.

After Blowing wiped
in quiches with 10% of
old reagent bleaches

Mixture washed with tannic
solution, dried, and 1% in above.
Hundred times, always 1% in strong
off from mixture, always

Marked 1261-E Labeled.

1458 Trade

8 Pull Out

1450 OK

99.5 OK

96.8% OK out of 1142 Records

81% on Bleaches.

1484-E

4/19/17

OK	x	OK	x	Drop test on 1484-E
OK	x	OK	x	1. — 9 times
OK	x	OK	x	2. — 20 " "
OK	x	OK	x	3. — 6 " "
OK	x	OK	x	4. — 20 " "
OK	x	OK	x	5. — 20 " "
OK	x	OK	x	6. — 2 " "
OK	x	OK	x	77 " "
OK	x	OK	x	5/2/17
OK	x	OK	x	Drop test on 1485-E
OK	x	OK	x	24 times
OK	x	OK	x	1484-E Saturday 5/12/17
OK	x	OK	x	Drop test
OK	x	OK	x	1 — 3
OK	x	OK	x	2 — 4
OK	x	OK	x	3 — 1
OK	x	OK	x	4 — 6
OK	x	OK	x	5 — 6
OK	x	OK	x	6 — 4
OK	x	OK	x	24 times
OK	x	OK	x	100% 100%
OK	x	OK	x	100% 100%
OK	x	OK	x	100% 100%
OK	x	OK	x	100% 100%

1484-E

57 lbs wood fibre
 43 lbs chalk
 2 lbs lamp black
 12 lbs rosin (WG)
 54 lbs alcohol

Make one dozen full size
 tanning solution as usuals,
 and sample to miller for drop test,
 this is a duplicate of 1340 and is
 the same as 1470 except that it
 contains a little more alcohol.

89.6% OK out. 1335

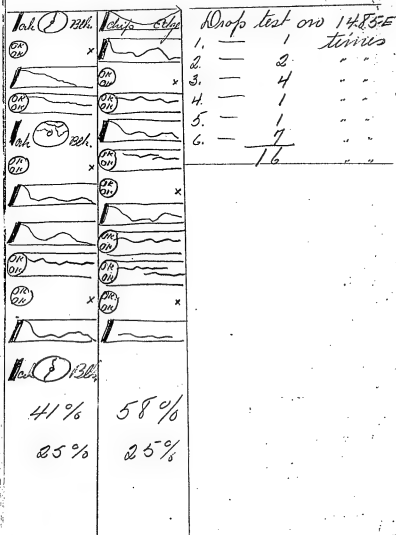
91.1% OK and Blacks. with
 tanning solution as usuals

duplicate on E. from. Drop test 31 moulding 99.77 Painting 42.7

Duplicate on I. Rejm. (99.8)
 42.7% OK out of 1895. Rejm.
 86.8% OK and Blacks.
 44.2% OK out of 1253
 89.2% OK and Blacks.

1485-E

4/19/17



1485-E

57-lb wood
 43-lb chalk.
 2-lb lamp black.
 15-lb tallow (W.C.)
 60-lb dust, black, oil.

After drying mix ~~in~~ in grinder
 with reground blanks as follows:

3 parts above

1 part reground blanks

make one drum full

send two rounds to miller for inspection
 and drop test.

82.2% OK on 1305 Records.

93.2% on Blencroft.

1486-E

4/25/12

1486-E

57 lbs. wad.

43 -

2" ^{chess} laugh wad.15" ^{chess} (Wk)80" ^{chess} ^{chess} ^{chess}

May 35% ground *Bombus*
 mixed with wood & bark.

OK

x

Drop test 1486-E

OK

x

1 - 5 times

OK

x

2 - 1 " "

OK

x

3 - 3 " "

OK

x

4 - 2 " "

OK

x

5 - 1 " "

OK

x

6 - 3 " "

OK

x

15 " "

OK

x

78.1% OK Records

OK

x

73.5% Plaster OK

OK

x

OK

x

OK

x

OK

x

100 %

100 %

1487-E

5/1/17

Gross Gold

Down test 212 1487-E

On Silver

1 — 15

On Silver

3 — 20

On Silver

3 — 18

On Silver

3 — 8

On Silver

3 — 1

On Silver

6 — 12

On Silver

3 — 5

On Silver

3 — 3

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

On Silver

3 — 1

There are some old and low
 cuts in the mine

8.2% OK out of 865 Rounds

88.5% OK and Blank

66%

1487-E

57 lb wood.

43 lb chalk.

2 lb lamp glass.

18 lb Rosin.

80 lb alcohol.

36 lb oil reground blank.

all put in mine

7 make one deer full.

1488-E

5/1/17

Row (P) 1

(25)

1

(25)

2

(25)

3

(25)

4

(25)

5

(25)

6

66%

58°

1	5	tin
2	5	"
3	5	"
4	5	"
5	5	"
6	5	"
7	5	"
8	5	"
9	5	"
10	5	"
11	5	"
12	5	"
13	5	"
14	5	"
15	5	"
16	5	"
17	5	"
18	5	"
19	5	"
20	5	"
21	5	"
22	5	"
23	5	"
24	5	"
25	5	"

1488-E

A { 57 lbs wood,
43 lbs chalk,
2 lbs lampblack,
12 lbs resin, (E)
54 lbs alcohol, } make 3 bottles

above is same as 1484-E

B { 100 lbs old ground blatts
6 lbs resin (E)
30 lbs alcohol } make 1 bottle

Mix in grinder 1 part B to 3 parts A

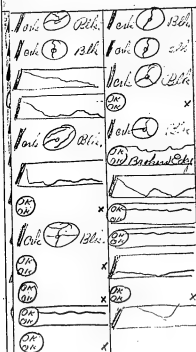
1489-E

Dup of 1461-E. Except
use I, heads instead of W.I.D.
to make alternate of bar.

Wink a Dead Test

1493-E

5/3/77



41%

41%

33%

16%

Drops lost on 1493-E

1	-	6	times
2	-	5	
3	-	5	
4	-	5	
5	-	13	
6	-	6	
		40	

1493-E

Same as 1479-E except that soft
blanks are reground, instead of
old records. — we have been
speaking of reground records
as reground blanks, —

58% OK out of 263 Records. 5/11/77
82.5% on blanks

1494-E

5/3/17.

⑤1K x 1/2 ② 134

Verd. Ricord. OK OK X

$$\textcircled{JK} \quad \times \quad \textcircled{JK} \quad \times$$


$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \times \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \times$

$\begin{pmatrix} 0 & k \\ 0 & k \end{pmatrix} \times \begin{pmatrix} 0 & k \\ 0 & k \end{pmatrix}$

JK JK

4 (JK) (JK)

OK OK

34	35
----	----

11

91%

66%

91%

66%

Drop test on 14 94-E

$$\begin{array}{r} 1 \text{ — } 4 \\ 2 \text{ — } 2 \\ 3 \text{ — } 7 \\ 4 \text{ — } 20 \\ 5 \text{ — } 9 \\ 6 \text{ — } 6 \\ \hline 48 \text{ times} \end{array}$$

1494-E

57 lbs wood filler

43 lbs chalk

2 lbs Lamp Black. duplicate of 1450

13. Ho Robin, 9 norm

50 lb alcohol,

Dry and grind three parts of this with one part of reground records,

52.4% O.K. out of 1258 Records 5/2/77.
76.4% on blanks.

0453

24th -

1472 was not continued on account of black being too weak. Drop test below 50

1479 was substituted - having less of old, reground powder -

Note that with (9) Rooin
% all there is greatest - may be a coincidence of circumstances,

Resumé of Rosin Blank Experiments.

See 1380E in Book 19,

1470-E blanks ^{OK} made ^{OK} blank depth inspection ^{OK} 50% lamp oil used powder blank moulds.
3-13-17 (WW) 358 87.2 3 moulds tested by mill. 91 3/4% OK
3-20-17 (WW) 701 71.3 89.6 1471 Danish 197 records 89.8% OK
3-21-17 (WW) 755 79.7 68.6 1471 Danish 197 " 89.3% OK
367 74.9 61.3 } records completely pulled up.

1470 E "Tanning Solution" (see 1380-E) used on powder blank moulds - also on record moulds.

4-16-17 (WB) 1624 blanks made 98.3 OK. before labeling.

87.7 OK. on inspection.

Records 97.1% OK. Drop test 46.

1472-E "Lubria" used on powder blank moulds.
Blacks made blank test 1/2 1471 Danish 90.1% OK on printing
3-14-17 (WW) 383 98.7% OK 375 1471 Danish 95.5% " 94% OK.
3-21-17 (WW) 523 97.5 67.7 217 " 1471 Danish 99.1% OK.
3-24-17 (WG) 1812 92.2 90.3 1508 " " " 95.5%
3-28-17 (K) 683 95.4 92.5 603 " " " 92.9%
3-28-17 (K) 1311 98.8 84.6 1095 " " " 96.3%
3-28-17 (K) 360 98.8

4-2-17 (9) 1113 99.1 96.2 1090 1471 Dan. 94.4%
4-2-17 (M) 376 96.1 { 79.4 734 " 92.2% OK.
79.8 190 " 91.6%
86.3 980 " 94.9%
96.0 480 " 97.9%

Residue of Rosin		Blacks Expts (cont)	
4-4-17 (N)	2364	97%OK	84.8% 798 90.6%OK
		{ 90.2 - 826 95.8%OK	
		{ some missing -	
4-4-17 ($\frac{1}{2} + \frac{1}{2}$)	2083	94.7%OK	{ 90.2 569 92.8 "
		{ 87.1 284 94.0 "	
		{ 94.2 966 94.0 "	
4-9-17 (I)	Record lost	82.8	2360 95.9
4-10-17 (IT)	not quite cure about 10 min.	82.8	2360 95.9
4-10-17 (IT)	" " " "	95.8	1837 95.8
4-11-17 (IT)	" " " "	91.5	(1464) ^{total} 95.8
		{ 7.986 95.9	
		{ 6.20 96.9	
		{ 4.013 95.8	

1472 abandoned acc. of low drop test. for 1479.

1473-E		(hydraulic press solution)	
3-17-17 (W.G.)	874	77.3%OK	87% 65% 97%OK 34
3-26-17 (W.G.)	874	77.3%OK	87% 65% 97%OK 34
4-16-17 (W.G.)	1308	99.4 "	76% 97 90.1 " 34

1473-Tanning solution stop sticking to powder black >> moulds but something queer later inspection.

1472-is half old shellac blacks ground up and gives comparatively little trouble by sticking, but the all rosin blacks require this tanning solution (See note on 1380-E Book 17)

Residue of Rosin Blank Expts (Cont.)

1479-E Tanning solution used on all
 made up 1539 74% 232 97.6% OK, drop test

4-9-17 (W.G.) 1539 74% 232 97.6% OK, drop test

4-19-17 (I) 79% 164 96.3 "

4-24-17 (E) 2637 99.1 873 2243 56.2% OK, 23
 if following cooled in clear by water in plate to prevent spotting

4-24-17 (B) 1613 99.8 72.8 983 96.0% OK 16

4-25-17 (E) 554 810 76.7 "

5-3-17 (E) 823 880 64.8 "

1480-E - 4-11-17 (W.G.?) Rosin moulds treated with paraffin
 made up 1446 99.4% 85.6% 1658 Residue 97.9% OK, drop test

1481-E 4-13-17 (W.G.?) Rosin (Oil or Lubricant on moulds)
 made up 1482 98.5% 92.1 1275 95.7 20

1482-E 4-18-17 (W.G.) Rosin, (Tanning solution on moulds)
 made up 1521 100% 74.9% 1123 97.7 25

1483-E 4-17-17 (W.G.) Rosin, (Tanning solution)
 made up 1458 99.4 81.0 1246 89.6% 77

Tanning solution keeps moulds perfect

difference was attributed to Resin
Fire occurring in Powder Blank. Opt
on Apr 25 suspect things so that this
change in cooling drier was forgotten.

May 2-7 { two rounds from powder 1479-E(I) not cooled
in drier give 91% OK. by Miller's inspection.
Marked 69 A Hoffmann's notation.

{ Four rounds from same powder cooled in
drier give 8%, 41% 33% and 83% resp.
marked 70 A.

Resume of Resin Blanks (Continued)

1484-E (W.G.) Resin Tanning Solution used.
made 1465 99.6 91.5 1246 89.6% OK ^{dropt} 77

1484-E (E) Resin. Tanning Solution used.
made 2302 99.7 86.8 1895 42.7% 31

1484-E (I) drier cooled —

1441 99.8

1485-E (W.G.) Tanning solution - Not cooled in drier.
made 1415 98.9 95.2 1250 82.2% ^{dropt} 16

1486-E (W.G.) Tanning Solution (not certain
made 1466 99% 93.5 1349 78.1 15-
(not cooled in drier?)

1496-E

5/8/17

[illegible]

100%	100%
------	------

100%	100%
------	------

1496-E - marked 75A

Make 100 lbs only.

57 wood

43 Chaltr.

2 Limpblack.

12 Bodin.

2 ounces, Castor Oil

54 lbs alcohol.

Send all to Miller in Building

(4) Save out 12 blanks,
to be varnished and painted regular.
Miller will put away 12 records and
the 12 blanks.

93.2% (21 out of 45 Records).

1497-E

Drop Test	
1 — 2	
2 — 5	
3 — 3	
4 — 11	
5 — 1	
6 — 2	
33 times	
50%	50%
33%	33%

1497-E Marked 78-A.

Make one chier full-

Run wood thru Schultz-Orill grinder
 to break up lumps before using -
 Same in every way as 1479-E
 Car load of wood solids was slashed
 to use. April 30 was carried in lumps
 more than usual and it gave trouble
 in the "day" mixer.

1498-E

5/9/17.

[illegible]

100%	91%
------	-----

100%	91%
------	-----

Only 23 Hands in
this Lot

1498-E

1498-E
Duplicate of 1480-E except that
~~W.G. Proin~~ USE W.G. Proin
also same as 1494-E except that
W.G. Proin is used.

Send 24 records to Miller

2009 Blauko made May 8.

100% O.K. in Plants Dept.

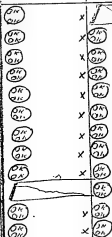
92% OK out of 73.2 Recruits.

792% OK Ento 783 Records.

77% OK w. Händel.

1501-E

5/9/17.



91% 91%

91% 91%

Drop Test.

1 - 20
 2 - 4
 3 - 12
 4 - 8
 5 - 3
 6 - 14
 60 times

1501-E

Make up one driver full ~~wood~~
 1479-E using $\frac{1}{2}$ Norway wood and
 $\frac{1}{2}$ regular Buprest wood-note
 both are each.
 Mark regular.
 Send 24 to Miller.

858% OK and 1537 Bords.
 874% OK on Klamia.

7502-E

5/9/17.

[illegible]

100%	100%
------	------

100%	100%
------	------

1484-E

1494-E Make up one Spruce full ~~1494-E~~
1494-E using 1/2 Norway wood

1479-E using $\frac{1}{2}$ Norway Wood

1502-E

Make up our drink full 1480-E
using $\frac{1}{2}$ Norway Wood and $\frac{1}{2}$ regular Dupont
wood - same as 1501-E

using $\frac{1}{2}$ Norway Wood and $\frac{1}{2}$ regular Dupont
wood - same as 1501-E.

wood - same as 1501-E

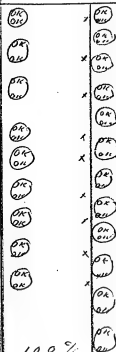
Send 24 records to Miller

92% Ok out of 1750 Records.

90% OK on Plants.

79-A

5/7/77



100%

100%

100%

100%

Drop test

- 1 — 20
 2 — 16
 3 — 18
 4 — 20
 5 — 20
 6 — 20

103 lines

1503 — Hoffman's (no. 79A)
 Regular (479-E) not screened.

2 rounds -

Mr. Ehlson says very rough surface -
 only used on regular moulds.

Indicates that the trouble is in the
 operation of screening.

without the old machine - ?

end

1506-E

5/9/17.

[illegible]

91%	100%
-----	------

91%	100%
-----	------

1506-E

Make 500 blanks from regular
1479-E Powder just as it leaves the mill
without screening.

Keeps record of % passing 150 screen and % passing 350 mesh screen as with the finished powder.

Print two prints from Mr. Edison's test moulds and also two rounds on a load of new moulds, also print the same on regular works for comparison. Refer to Miller and balance report on separate.

495 blanks made 100 % in Blanks Dept.

430 blanks OK on inspection 86 $\frac{8}{10}$ % OK.

403 Records inspected 9.65% OK.

1 disc for parallel track.

2 low spots.

2 low spots.
firmness of powder { 91% 180
72% 350

Surface on unscreened blanks
decidedly worse —

96.5% Ok out of 403 records.

86.5% OK on Blank.

680

1507-E

5/10/17.

[illegible]

1507-E-

One dried full-
57 wood,
43 chalk,
2 lampblack
12 Borax
1 (ounce) castor oil
54 lbs alcohol -
Send 2 rounds to Miller for inspection
and drop test.

94.2 OK get 984 Recs.
87.5 on blanks.

1508-E

5/9/17

Drop Test

1.	—	3
2.	—	8
3.	—	1
4.	—	11
5.	—	2
6.	—	10
		<u>35 times</u>

1508-E

5/10/17

Drop Test

1.	—	5
2.	—	1
3.	—	2
4.	—	5
5.	—	13
6.	—	20
		<u>46 times</u>

100%	91%
100%	91%
83%	100%
83%	100%

1508-E

Make up one drier full regular 1479-E powder except run drier for a shorter time to leave a trace of alcohol in powder and send Miller schedule on which it is run to put in Book - also 2 rounds records for inspection

Drier Run 2 hours - Temp. powder when vacuum broke 138°F highest point. Powder given flame test. no alcohol indicated, altho powder seemed damp. glass on drier had beads of moisture on inside.

Moisture test 1.6%

Grain sample 90% 180 77% 350

Moulding sample 97% 180 88% 350

936 blanks made 100% OK in blank dept.

77.2% OK on inspection

2 724 Records inspected 86.5% OK.

94.3% OK out of 672 Records.
78.5% OK on blanks.

1509-E

5/19/17.

[illegible]

1510-E

5/10/17

30	x	Drop test
29	x	1 — 7
28	x	2 — 1
27	x	3 — 8
26	x	4 — 4
25	x	5 — 4
24	x	6 — 5
23	x	29 times
22	x	
21	x	
20	x	
19	x	
18	x	
17	x	
16	x	
15	x	
14	x	
13	x	
12	x	
11	x	
10	x	
9	x	
8	x	
7	x	
6	x	
5	x	
4	x	
3	x	
2	x	
1	x	

100%	100%
------	------

100%	100%
------	------

1510-E

57 wood
43 chalks
2 lampblack -
13 lbs rosin (rosin)
50 lbs alcohol
make one driver full
Regular all time -

1511-E

5/16/17.

24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

x Every one of these records has
 x a fine surface, no cracks.
 x But all have a run out
 x made by cloth which can
 x be seen by eye -
 x These are undoubtedly
 x due to the bulged up
 x Cotton flock

(Part of the lot)

along hair not a pull out

91%

91%

No. of test

1 — 20
 2 — 20
 3 — 20
 4 — 20
 5 — 20
 6 — 20

120

Hoffman says. Moulds washed
 with Tannin diff-blades removed
 1/16 above mould

rings Secant 1/4" strike
 off-leaves Moulds clean
 Run on 1261 & check

Blanks Collops 217 to 225
 12 Blanks made after
 100% — too thin

Records Collops
 180 — 189 — 184.1
 Too thin

1511-E

Take some regular powder
 screened, put in some Cotton
 flock. For every 16 lbs of
 Reg powder add 1 lb of flock
 Mix it thoroughly in a
 mixer, Make 12 good
 blanks —

Print on new moulds
 or Compensator by new
 moulds —

1512

wait—

Make one Ruyi full
of powder Raglai, except
~~make~~ make it $3\frac{1}{2}$ wood
 $\frac{1}{2}$ Cotton flock 3 Chalk
+ Reg preparation of
Resin — Screen &
Run Reg ~~make~~
+ send 24 to Edison

1513-E

5/15/17

[illegible]

100° 2

100%

100%

100%

1513-E

Same mix as 1505-E but dried
like 1508-
Make one drier.

C95J

20
 20
 20
 20
 20
 20

x
 x
 x
 x
 x
 x

Caliper 172-1
 181-1
 175-1
 170-1
 181-1

New moulds used, surface fair
 very few cracks, Micro shows
 moulds themselves has big
 scratching. Round disc marks
 fibres many other defects
 rough looking smooth
 part.

Drop test all went 20 one we
 dropped 100 times this showed a
 radial crack very fine from edge
 not reaching middle & would
 pass. Continued dropping
 till went 300 didn't break

We now drop it 5 ft on hard
 floor. Broke on 135th drop

Entirely too much flock
 1/4 of amount possibly less it

1516

Dalys Weaving Cotton flock
 thru revolving screens flock
 falling into mixer - to 450 gms
 Reg mix dry added 21 @ 22 grades
 flock
 4 @ 5 blanks made -

Print on Reg moulds

Make test for surface
 & Drop Test

Printed on New Moulds

Notice sub broken Enger one last fibres
 1/32 dia -

1517-E



Depth test	Calculus point
1 - 20	184.1
2 - 20	189
3 - 19	186.1
4 - 20	180
5 - 20	196
119	191

W. L. Edison Reminders.
One of the drops in the top of the
cups shows a small flow of thin
holes.
Holes several times more white
small dots of holes also fine
poorly distributed

1517

Dup of 1516 —
best only 15 grains
flock -

1518-4

5/2

ON	x	1	20	.207
ON	x	2	20	.2051
ON	x	3	20	.2011
ON	x	4	20	.207
ON	x	5	20	.208
ON	x	6	20	.206
FERN			120	

only 10 birds

1518

Dep 1516 -

But only 10 grames
flock

1519-E

5/24/12

27
21627
21627
21627
21627
21627
21627
216

	Drop test	Caliper prints
x	1 — 8	.203.1
x	2 — 8	.206.1
x	3 — 20	.209
x	4 — 20	.206
x	5 — 20	.203
x	6 — 3	.203
x	79	

1519—

Drop 1516—

But only 5 grains
flock

1520

5/19/17

Q ₁ Q ₂	x	Depth	4
Q ₁ Q ₂	x	8	9
Q ₁ Q ₂	x	3	20
Q ₁ Q ₂	x	4	20
Q ₁ Q ₂	x	5	20
Q ₁ Q ₂	x	6	20
			<hr/>
			93

Calc/ps points:

.195

.153.1

.007

.505

.205.1

2.11

1520

Dep of 1516 -
But no flock at
all

1521-E

Drop test	Caliper prints
1 — 20	.203
2 — 20	.216
3 — 20	.211
4 — 20	.196
5 — 20	.216, 1
6 — 20	.199
120	

1521 E

Hoffman grinds some powder in mill at Stonehouse, mixing flock gradually in, the mill as powder is being ground.
Make 1/2 doz blanks & print -

Add 6 grains flock for each lb of powder

1522-E

6/6/7

OK

OK

OK

OK

OK

OK

OK

x Drops Test.

x 1 - 20

x 2 - 20

x 3 - 20

x 4 - 20

x 5 - 20

x 6 - 20

106 times

100%

100%

Syringes bad due to clogs
of fibre.

Calico points

202

157

191.1

157.1

191.1

1522-E Duplicate of 1516-E

Expt. better. More accurate with
a different shading

20 grains of fibres to 450 pounds

6 bales of same weight
send to Externs

1523-E

6/6/17






	x	Drop test	Caliper point
20	x 1	20	.202
20	x 2	20	.200
20	x 3	20	.209
20	x 4	20	.188.1
20	x 5	15	.193
20	x 6	20	.191.1
<u>118 times</u>			

Surface fine all for Anselm
dust to dots in fibre

1523-E Dup. of 1522-E
Except 15 grown of flock
6 plants of area

6/6/17

1524-E

	Drop test	Calipers points
	1 - 30	.185.1
	2 - 15	.192
	3 - 20	.193.1
	4 - 13	.190.1
	5 - 30	.194.1
	6 - 30	.195.1
	<u>10.7</u> times	

83%

83.0

1524-E Dup of 1524-E
 Except 10 grains of flint.
 6 Hanks of wire

15-25-E

	Drop	test	Caliper points
x 1	—	20	194.1
x 2	—	26	197
x 3	—	13	194
x 4	—	20	199.1
x 5	—	20	204.1
x 6	—	20	202.1
		<u>113</u>	<u>113</u>

113 trials

15-25-E Out of 15-22

Except 5 grams of each
6 blanks of each

1526-E

1 (2A)	x	1	20	Calipso print
2 (2A)	x	1	20	197.1
3 (2A)	x	2	20	202.1
4 (2A)	x	3	4	205.1
5 (2A)	x	4	20	190.1
6 (2A)	x	5	16	197.1
		6	6	190.1
			86	times

91%

91%

1526-E

Blanks made into
cut floor.
6 Blanks of each

1537-E

6/8/14

②	100's	Tests	Califco points
1.	—	20	Chipped on edge 179
③	✓	2.	— 20 173.1
④	x	3.	— 20 174
⑤	✓	4.	— 20 183
⑥	✓	5.	— 20 167
		6.	— 20 166.1

83% 120 times

76% Surface Run Out in
only one of times.

1537-E

459 grains powder 20 grains.
 No. 1 puts in Ray Imperial
 Drill (Bore Holes) rule for 1 1/4 hrs
 then put through 20 Carbide pieces
 30 to 50 grains remaining on
 screen, Cottons stock, and passed
 up powder in flask form

1528-E

6/8/77

	Drop test	Calico print
1. —	20	.181.1
2. —	20	.153
3. —	20	.155.1
4. —	20	.150.1
5. —	20	.175
6. —	20	.177.1
	120 times	

16%

16%

1528-E

450 times

20 gress rollers, 5 to 6% through
of flock removed in angle

1530-E

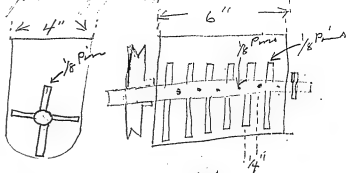
6/8/77

	Caliper points
1	20
2	20
3	20
4	20
5	20
6	20
75%	120
75%	

1530 E

450 grains, ben. to 1000 grains, ben.
 Just no fault, just no movement
 about 1700, 2000 mtd.

Just below 1000 mtd. 1000 mtd. 1000 mtd.
 4 grains of 1000 mtd. 1000 mtd.



3 1/4" / 10000
 10000

1530-E

6/5/7

$\frac{Q_2}{Q_1}$	x	Alto/Look	Calico/prim
$\frac{Q_2}{Q_1}$	x 1. —	20	300.1
$\frac{Q_2}{Q_1}$	x 2. —	20	190.1
$\frac{Q_2}{Q_1}$	x 3. —	20	187
$\frac{Q_2}{Q_1}$	x 4. —	20	207.1
$\frac{Q_2}{Q_1}$	x 5. —	20	197.1
$\frac{Q_2}{Q_1}$	x 6. —	20	202

F30

120 turn

F30

1532E Out Limit of 1530E

Except used 5 grains of 1000
 430 Pounds at little less than
 2 grains from 1000 grains, and so
 1000 Pounds

1533-E

6/8/6



Drop test

Caliper prints

1. - 20

.301

2. - 20

.194

3. - 20

.1941

4. - 20

.1961

5. - 20

.1971

5. - 20

.1921

180 times

1533-E

Drop test 1533-E
 used 15 minutes of work 458.000
 under 5 1/2 to 6 grains of sand
 and powder

1135

1534-E

6/12/17

Drop test	
1. —	20
2. —	8
3. —	2
4. —	4
5. —	10
6. —	20
<u>64 times</u>	

1534-E

57 lbs wood filler

43 lbs chalk

2 lbs lamp black

1 1/2 lbs Rosin

50 lbs Alcohol

Make 4 drums full

Send two rounds to Miller for
inspection and drop test.

35.2% OK out of 3048 Records
 96.5% OK on blank.
 447% OK out of 1738

16% 16%

16% 16%

1535-E

1535-E

Make two drums regular 1505 powder
but after mixing dry in Imperial mixer
run thru the Shultz O'Neil Mill and
then put back in Imperial mixer after
weighing carefully and mix gun
regular way.

Make regular send 2 rounds
to Miller in Building 4 —

445% OK out of 1246 Records.
644% OK or O.K.

80/6

80/6

1537-E



Dye test

ink in prints

1	20	.991
2	20	.993
3	20	.991
4	20	.991
5	20	.991
6	20	.991
7	20	.991
8	20	.991
9	20	.991
10	20	.991
11	20	.991
12	20	.991
13	20	.991
14	20	.991
15	20	.991
16	20	.991
17	20	.991
18	20	.991
19	20	.991
20	20	.991
21	20	.991
22	20	.991
23	20	.991
24	20	.991
25	20	.991
26	20	.991
27	20	.991
28	20	.991
29	20	.991
30	20	.991
31	20	.991
32	20	.991
33	20	.991
34	20	.991
35	20	.991
36	20	.991
37	20	.991
38	20	.991
39	20	.991
40	20	.991
41	20	.991
42	20	.991
43	20	.991
44	20	.991
45	20	.991
46	20	.991
47	20	.991
48	20	.991
49	20	.991
50	20	.991
51	20	.991
52	20	.991
53	20	.991
54	20	.991
55	20	.991
56	20	.991
57	20	.991
58	20	.991
59	20	.991
60	20	.991
61	20	.991
62	20	.991
63	20	.991
64	20	.991
65	20	.991
66	20	.991
67	20	.991
68	20	.991
69	20	.991
70	20	.991
71	20	.991
72	20	.991
73	20	.991
74	20	.991
75	20	.991
76	20	.991
77	20	.991
78	20	.991
79	20	.991
80	20	.991
81	20	.991
82	20	.991
83	20	.991
84	20	.991
85	20	.991
86	20	.991
87	20	.991
88	20	.991
89	20	.991
90	20	.991
91	20	.991
92	20	.991
93	20	.991
94	20	.991
95	20	.991
96	20	.991
97	20	.991
98	20	.991
99	20	.991
100	20	.991

120 turns

1537-E

used 10 g of dye 1530-E dye
 8" g of dye 1530-E dye
 8" g of dye 1530-E dye
 8" g of dye 1530-E dye

1538-E

[illegible]

1538-E

At about 1% of cotton flesh
 from sample ⁽¹⁰⁰⁻⁵⁾ added by Mr. Hanson
 to the powder, see it is fed to the
 mill - about 1750 lb. of powder
 made - no clogging of mill covers.
 mixed and variable and print
 regular. And 6 blades to mill
 and 2 varnished blades and two
 rounds for inspection and deposit.

Cotton flock does not separate on screening
603% OK out of 648 Records.
95+ % OK on blades.

11451

1539-E

6/12/77



Drop test

1. — 3
 2. — 2
 3. — 1
 4. — 8
 5. — 1
 6. — 16 times

68% 68%

68% 58%

1539-E

Add about 2% of cotton linc
 to the powder as it is fed to
 the mills. (One pound to each
 bag of unground powder.)

Moist, varnish and print regular
 send six blanks to Miller also
 two varnished blanks and two
 rounds of records for inspection, &
 and drop test.

35.3% OK out of 76 Records
 96.2% OK on blanks.

549th print no signs of wear
on Merid 6

1542-E

2 Moulds made with nichel prelin
plating .010 thick - soaked up with
copper - Send the 3rd - 20th - 40th
and every 20th print also last print
to Miller for Mr. Solow.

1543-E

6/13/77



8%

8%

1543E

Print 12 blanks just as
^{square edge}
 they are without side
 Edging — Varnish Regular

Worse

6/13/77

Figure 1 consists of two columns of line graphs, labeled A and B. Each column contains seven individual graphs, numbered 1 through 7 from top to bottom. The y-axis for all graphs represents the percentage of water vapor sorption, and the x-axis represents time in days. Graph A shows a gradual increase in sorption, reaching approximately 16% after 14 days. Graph B shows a much faster increase, reaching approximately 8% after 14 days. The graphs are arranged in two columns, A and B, with 7 rows each. The y-axis represents the percentage of water vapor sorption, and the x-axis represents time in days. The graphs for A show a steady increase in sorption, while the graphs for B show a rapid increase in sorption, reaching a plateau around 8%.

Graph	Percentage of Water Vapor Sorption (%)
A1	0%
A2	0%
A3	0%
A4	0%
A5	0%
A6	0%
A7	0%
B1	0%
B2	0%
B3	0%
B4	0%
B5	0%
B6	0%
B7	0%
Average	8%

1544 E

Make 24 blanks old
Schedule (not 12 & 1)
Send to Kitcher,
He showed ~~some~~ ^{marked A}
leave 12 " unedged + print
with square edge
+ the other 12 are to
be edged the way its
done now + printed
Call these B

Both sets worn much
Regular way

This Mould was called after examining
335 prints and decided to put Mottled
Surface had 7th Edison & 7th Diamond
Surface. sound good put Mottled
back on lineup.

405 print Good Surface.

503 print. It is in good print O.K.

625 prints Surface seems to be getting
better no signs of wear.

888th Print all off for Mottled
Surface shows no signs of wear.

1545E

Nickel on these Moulds 007

This is a Nickel Mould, both sides
10th print & 138th print both have smooth
continuous general surface, but
both have cracks very considerable
more on 138th than on 10th & but not
very much. I notice Mottled is
larger on 138th than 10th, the 10th is hard
to see while 138th is easy to see.
The pressure has increased their size.

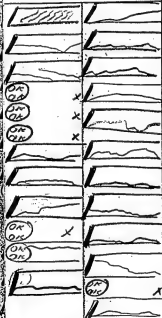
On both are large O pits varying
from 005 to 020, all are generally
round. The moulds show scratches
probably in 2nd master. Pits may
be also. The waves of 138th seem to
be absolutely uninjured at start &
not scratched with finest scratches
like Copper Moulds.

260th does not show a single scratch
& seems absolutely uninjured.

Mottled seems larger.

1546-E

6/13/14



41%

8%

33%

8%

1546-E Dup. of 1505-E

Expt half Norway Wood & half
 Dupont Wood. Dupont wood
 covered through #4 screen

Mordit & Van & print regular.

Dupont wood is very wet -

1547E

FERN

Cal/100 points

.207

.199

.204

.200.1

.191.1

.195.1

66% Comd 3 blanks were ok before

50 per cent Varnishing but after
Varnishing they showed
Edge cracks before they
went in the case
Have the samples

1547E

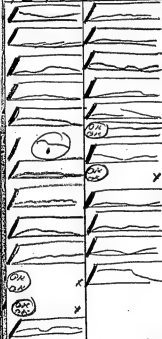
Hoffman

Dally takes enough powder
(req) or puts in 1% (about) of
Raw Cotton fibers -

Make 12 Blanks, Edge
Print + Varnish
Regular

6/18/77

1548-E



16%

8

16%

16%

1548E

Duplicate 1531
print 24 blanks

ENC.

1549 E

4/13/10

Inspect & up-stands			
Recd.	Conch.	OK.	
72	66	6	7%
60	41	19	32
192	166	26	14%
84	65	19	22%
408	338	70	
17.15% OK.			

1549 E

Printed with boiler pressure
at 110 at regulator instead
of 120.

Run pressors this way
for 3 hours
143% OK out of 944 Records.

179 3

72% OK out of 538 Records
printed on Regular stands
120 lbs.

12 1/2 %
8%

6/13/10

1550-E

1550 E

Regulator set at
100 degrees steam
instead of 120 as
regular - print
on other work
presses 3 hours
8.9% OK out of 38. Records

100% OK

12 1/2%

9/19/17

1551 E

Moulds with feed lines
on Edge —

No Good.

1552-E

OP

x

Vol D Bl

OP

x

OP

x

Vol D Bl

Vol D Bl

Vol D Bl

85%

85%

2
Note blank
cracked clear
across

Calypso points

.209

.224

.208.1

.212

.234.1

.223

1552-E

5 lbs powder

Add 5 g of Air slaked

Lime - & mixed thoroughly

Use & Print regular
Slak lime out of Bottle
in Chemical room.

Made 7 Blanks

Mr. Gray the Night Dept said
these Blanks showed numerous spots
which appear in surface before being
examined

6/13/17

1553-E

25



OK

This Experiment was
run on 750 hydraulic
pressure instead of 850

no better

21% OK out of 420 Records

8%

1554-E

Regular blanks made
to day. 6/13/17

put through drop test

- 1-2
- 2-4
- 3-4
- 4-1
- 5-2
- 6-1
- 7-1
- 8-1
- 9-2

average 2 drops
each

76 times

(155)

6/15/17

1555-E

Ind. (D) Blk

Ind. (D) Blk

Ind. (D) Blk

Ind. (D) Blk

Ind. (D) Blk

Ind. (D) Blk

6 blanks not frag. on account of cracks

1555-E

12 blanks loaded in center and
raked off toward edges all around



Mr. Gray reports that 1 blank
developed cracks before firing, being
3 cracked when fired & on
one side & 2 cracked in over

1556-E

6/15/17



2 blanks not printed
due to error.

1556-E

12 blanks loaded on one side as
usual and that side marked
so that we will know it on
the printed record.



mark here

2 blanks double checked and OK.

1557-E

6/15/17

1 oak (1) Blk
1 oak (2) Blk
1 oak (3) Blk
1 oak (4) Blk
1 oak (5) Blk
1 oak (6) Blk
1 oak (7) Blk
1 oak (8) Blk

3 blanks after Vannishing
Shore also near the Edge.
did not print there

1557-E

Load 12 blanks in seven little
conical piles and then strike off.



1558-E

6/15/11

2A

X

2A

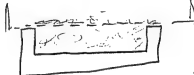
X

16%

16%

1558-E

load 12 Blanks thru an 8 mesh
sifter and then strike off as usual



6/15/77

1559-E

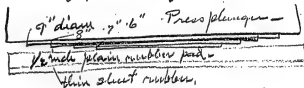
2A	X	2B	X
3A		3B	
4A	Y	4B	
5A	X	5B	X
6A		6B	
7A		7B	
8A	X	8B	
9A		9B	
10A		10B	
11A		11B	
12A		12B	
13A		13B	
14A		14B	
15A		15B	
16A		16B	
17A		17B	
18A		18B	
19A		19B	
20A		20B	
21A		21B	
22A		22B	
23A		23B	
24A		24B	
25A		25B	
26A		26B	
27A		27B	
28A		28B	
29A		29B	
30A		30B	
31A		31B	
32A		32B	
33A		33B	
34A		34B	
35A		35B	
36A		36B	
37A		37B	
38A		38B	
39A		39B	
40A		40B	
41A		41B	
42A		42B	
43A		43B	
44A		44B	
45A		45B	
46A		46B	
47A		47B	
48A		48B	
49A		49B	
50A		50B	

58% 16%

50% 16%

1559-E

Make 24 Blanks with discs of cardboard used to build up the center of plunger of the rubber press.



700 lbs pressure on Rubber press

1561-E

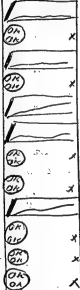


16%

16%

630 lbs on Rubber press

1562-E



58%

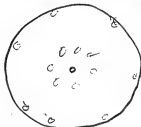
58%

1561-E 12 blanks 700 lbs Rubber press 16%
 1562-E 12 " 630 " " 58%
 1563-E 12 " 560 " " 66%
 1564-E 12 " 490 " " 83%
 1565-E 12 " 420 " " 41%
 1566-E 12 " 350 " " 50%

Sent all to Miller for inspection -
 Regular 1505-E in every way
 except variation of pressure on
 rubber press; Mould varnish
 and print regular -

1567-E

Make screen tests on powder taken from near the center and from within $\frac{1}{2}$ inch of the edge of a blank just as it comes from the rubber press.



samples near center

samples near edge

Edge } 98% 150
74% 350

Center } 98% 150
74% 350

evidently motion of powder and air toward the edge causes no segregation —

June 15-17

Discovery of an
important Principle

The powder in the rubber packing-
press must be considered as a
mixture of powder and air, and
we must get rid of the air.
Note 1560-E and further
experiments in

↙
Book 22

[ITEM(S) FOUND IN BOOK]

Vacuum dryer system changed
to water cool Apr 24.

Vacuum dryer system changed to
decrease exhaust pressure Apr 24.

Vacuum dryer system changed to
double exhaust several weeks
earlier.

[ITEM(S) FOUND IN BOOK]

$\begin{array}{r} 210 \\ 122 \overline{) 215} \\ \underline{124} \\ 91 \end{array}$ — 1207

$\begin{array}{r} 214 \\ 128 \overline{) 189} \\ \underline{128} \\ 61 \end{array}$ — 199

$\begin{array}{r} 207 \\ 195 \overline{) 213} \\ \underline{195} \\ 18 \end{array}$ — 204

$\begin{array}{r} 210 \\ 208 \overline{) 193} \\ \underline{198} \\ 5 \end{array}$ — 200-1

$\begin{array}{r} 159 \\ 187 \overline{) 196} \\ \underline{187} \\ 9 \end{array}$ — 191.1

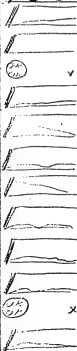
$\begin{array}{r} 209 \\ 205 \overline{) 192} \\ \underline{205} \\ 87 \end{array}$ — 1951

$\begin{array}{r} 211 \\ 205 \overline{) 192} \\ \underline{205} \\ 87 \end{array}$

**Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 22
Notebook, N-17-06-15**

This notebook was used by William W. Dinwiddie, Archie D. Hoffman and possibly other experimenters during June-July 1917 for notes on efforts to improve Edison disc records. There are numerous comments by Edison on the work performed. The entries pertain primarily to a sequence of experiments numbered from 1568E through 1656E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. Some tests involve records printed with nickel faced molds. The entries generally consist of instructions by Dinwiddie or Hoffman describing the experimental records wanted, accompanied by evaluations of the test records based on durability, thickness, and edging. In one entry Edison criticizes Dinwiddie and others for their experiment planning, while in another he complains that his "instructions were not followed in this experiment." The front cover is labeled "Disc Record" and "22"; the back cover is labeled "22." The pages are unnumbered. Approximately 190 pages have been used.

1568-E



16%

16%

1568-E

Made 12 bladders made
in regular ways but put
powder down by hand the old
way we did to get air out,
Send up to Vornish & print
regular.

This putting was done too late
in the process to do any good —
after the packing point.

6/15/71

1569-E

[illegible]

Average percentage
10.66-m.

1569-E

1569-E Duplicate 1560-E
but make 48 blanks &
send up for Hammelrig
& print as soon as possible

The felt used in this experiment was all cotton - The felt used in 1560-E was all wool -

The gray felt used in 1870 was part cotton and much poorer quality than the red felt used in 1860 -

1570-E

[illegible]

2 blanks directed for info

66.6% Com.

66.6	% Perfect
------	-----------

1570-E

Make 100 blanks with double thickness of gray felt in place of the thin rubber in the rubber press, send 24 front. to Melillo

[illegible]

91%

66%

75%

91%

66%

75%

Average Percentage 73.3%

1572. E. coll. left

1572-F with this rubric

Lab. O'Brien

OK

012

On River Edge.

52

OK
OK



24

OK
OK

12

ON

OK
O1

✓

四

For

1

1

1

1

1

1

1

1

1

1

1

1

1

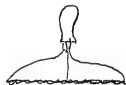
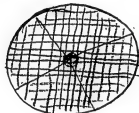
1

L

1

83%

1572-E



disc of wire mesh with handle
used to press the powder down
before laying on the thin rubber -
Mabel 24 blanks

274 made with thin rubber
in packing press -

24 made with thin felt like
1560

Only made & printed 10 of each

Refer to 1575 and 1585

6/18/12

1573-E

LEAFING



Distichis sp.

1573-E

Requies 13 blancher
that have been made
horns - big, sturdy.

Leafy inf. stems
& fruit regular.

1574-E

[illegible]

83%	100%
-----	------

53%	100%
-----	------

Average forecasting

9/6%

1574-E

Make 24 blanks using flat rubber and one thickness red felt same as the felt used in 1566-E

Bring the press up as slowly as possible and hold at full pressure about 10 seconds.

varnish and print regular.
Send to Miller -

6/18/17

1575-E



41% 75%

41% 75

62.5%

1575-E

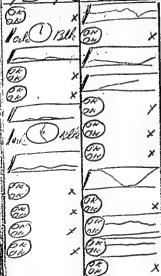
Capping machine with magnet removed, and a flat plate $\frac{1}{8}$ smaller diameter than the handle, in place of magnet. - $\frac{1}{8}$ holes drilled all over plate $\frac{1}{8}$ apart - and a piece of close mesh heavy wire screwed on face of plate.

Operate same as hand tool in 1572-E - Make 24 blanks. Varnish and print regular send all to Miller - use the thin rubber sheet in packing press

Refer to 1585

6/18/72

1576-E



58%

66%

58%

50%
















62.5%

1576-E

Same as 1575-E except that
piece of soft thick felt from
American Felt Co is used on
the wire ~~piece~~ inside of the plate,
make the thin rubber sheet

6/18/12

1578-E

	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x
	OK OK	x

83% 75%

75% 75%

79.1%

1578-E

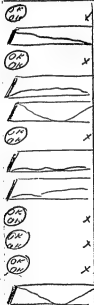
Same as 1575-E except that red felt (same as used in 1560-E) is laid on the powder and left on in the packing press.

227

1560-E

6/19/77

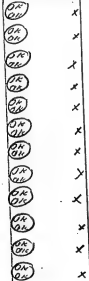
Cunningham Felt Co. Left felt



50%

50%

Cunningham Felt Co. Hand



100%

0%

93.5% Blend of 123 Base

Blowing Report

Elyd 4
 1st Cut 105
 2nd Cut 33
 3rd Cut 4

Re. Chgs.

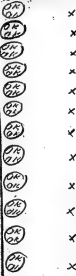
7
 2
 9

Total 91.6%

1560-E

white felt

Standard Felt Co.



100%

100%

88.5% Blend of
 115 Base

Blowing Report

1st Cut 113
 2nd Cut 39
 3rd Cut 2

Re. Chgs.

5
 3
 1

92.0%

Green Felt.



100%

91%

6/29/17

1583-E

2A	x	2A	x	Drop Test
2A	x	2A	x	
2A	x	2A	x	
2A	x	2A	x	
2A	x	2A	x	
2A	x	2A	x	
2A	x	2A	x	
2A	x	2A	x	1. — 4
2A	x	2A	x	2. — 4
2A	x	2A	x	3. — 2
2A	x	2A	x	4. — 2
2A	x	2A	x	5. — 2
2A	x	2A	x	6. — 1
2A	x	2A	x	15 times

6/20/77

1584-E

2A	x	2A	x	Drops	Feet
2A	x	2A	x	1. —	20
2A	x	2A	x	2. —	6
2A	x	2A	x	3. —	1
2A	x	2A	x	4. —	12
2A	x	2A	x	5. —	20
2A	x	2A	x	6. —	20
2A	x	2A	x		<u>79 times</u>
2A	x	2A	x		
2A	x	2A	x		
2A	x	2A	x		
2A	x	2A	x		
2A	x	2A	x		
2A	x	2A	x		
2A	x	2A	x		

100% 100%

100% 100%

1584-E

Same as 1583-E but use
white felt of Standard felt Co.

	Edging	Repart.	Repart.	Repart.
1st Cut	22	6	13	3
2nd Cut	13	3	8	2
3rd Cut	8	4		1
		13		9
Total 59%				

6/20/17

1585-E

Droo test	
1-5	
2-18	
3-5	
4-20	
5-20	
6-7	
75 turns	
91%	91%
91%	91%
91.5%	

1585-E

Iron plate with grooves $\frac{1}{4}$ and $\frac{3}{8}$ lands - with coarse wire mesh fastened on press in place of rubber use thin felt - same as 1560-E make 48 plumbos - and 24 ft miller



Edging Report		Revised	
Edged	Ch.	Revised	Revised
1st Cut	19	8	2
2nd Cut	9	2	2
3rd Cut	5	0	3
Total		12	7
Total %		63.4%	

Refer to 1572 and 1575

1586-E

[illegible]

100%	75%
------	-----

100%	66%
------	-----

(87.5%)

Drop Test.

1 — 1
2 — 16
3 — 20
4 — 2
5 — 4
6 — 20
63 times

1586-B

1586-E
Same as 1585-E except more
direct on the powder and no felt.
Make 48 blanks - send 20 to
Miller

Miller		Edging Report		
	Edged	Chk.	ReEdged	Rev.
1st	20	4	14	3
2nd	14	5	9	0
3rd	9	6	0	3
		15		3

Total % 75%

6/21/77

1587-E

	x		x	Drop Test
1		3		
2		20		
3		13		
4		10		
5		3		
6		1		
				49 times

Part D

58% 75%

58% 75%

66.6

1587-E

Same as 1581 except that
special moulded pad is used
with holes moulded in center -
Use red felt of original 1560 24%
make 24 blanks,

6/21/47

1589-E

OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x
OK	x	OK	x

Drop Test

1 — 9
 2 — 3
 3 — 11
 4 — 5
 5 — 7
 6 — 6
 30 times

100% 83%

100% 83%

(9/6)

1589-E

Same as 1582-E except use special
 pad with sponge rubber on top &
 and sponge rubber cut in one
 inch squares with circular saw.
 Make 48 plaques.

1560-E	1560-E	6/20/11		1560-F 1238-E Lindsley
Standard Tilt bar	Quinn's Tilt bar	H		

1591-E - (1238-E Schedule

20	x	20	x	Drop test	Caliper print
20	x	20	x	1 — 2	213
20	x	20	x	2 — 10	218.1
20	x	20	x	3 — 1	211.1
20	x	20	x	4 — 5	209.
20	x	20	x	5 — 2	216
20	x	20	x	6 — 3	209

1593-E-1238-E Schedule

6/21/17

Drop test	Calipers points
1. — 8	.218.1
2. — 1	.211
3. — 6	.211
4. — 18	.209.1
5. — 20	.212.1
6. — 16	.207

69 times

Same as 1593-E
only on this 1238-E Schedule

91% 91%

91% 83%

91.6%

76% OK out of 1206 Bls.
86% OK Bls.

1593-E

6/22/17

same as 1560 except use
Standard Felt Company - white felt -

Send 34 to Miller

Drop test	Calipers points
1. — 20	.202
2. — 3	.209.1
3. — 20	.208
4. — 15	.214
5. — 20	.213
6. — 20	.211

9 times

Edging Report.			
Edged	OK	Bl	Blis.
1st Ed 39	34	4	1
2nd Ed 4	2	3	3

Total % 92.3%

84% OK out of 126 Bls.
78% OK out of 130 Bls.
82% OK out of 130 Bls.

91% 75%

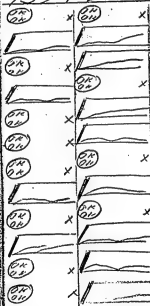
91% 76%

83.3%

CSS

6/21/17

1594-E



66% 33%

66% 33%

Drop test Calypso Point
 1. — 20 213.1
 2. — 1 194
 3. — 2 205
 4. — 20 203
 5. — 20 208
 6. — 20 215
 8 3 times

Edging Report 80.2%

1594-E

Special moulded rubber pad
 with $\frac{1}{8}$ holes moulded in center
 over area of a $2\frac{1}{2}$ inch circle,
 Pad cemented on press in regular
 way - using device to vent the
 hole same as 1580-E thru
 top plate of press -
 make 48 blanks -
 send 24 to Miller

6/21/17

1595-E



Drop Test		Caliper Points
1	16	.214.1
2	20	.221.1
3	20	.226
4	2	.222.1
5	7	.211
6	13	.213.1
80 times		

Edging Report 79.4%

75% 50%

75% 50%

(62.5%)

1595-E

Same as 1594-E except use
Standard felt car felt laid on
powder

Make 48 blanks

Send 24 to Mills

6/2/17

1597-E 26 Blanks in Lot.

OK	x	OK	x	Drop test
OK	x	OK	x	1 - 20
OK	x	OK	x	2 - 20
OK	x	OK	x	3 - 5
OK	x	OK	x	4 - 3
OK	x	OK	x	5 - 4
OK	x	OK	x	6 - 16
OK	x	OK	x	68
OK	x	OK	x	blanks
OK	x	OK	x	7 discarded for being broken
OK	x	OK	x	Caliper points
OK	x	OK	x	.2151
OK	x	OK	x	.213
OK	x	OK	x	.2161
OK	x	OK	x	.2231
OK	x	OK	x	.219
OK	x	OK	x	.214

80.5

all these were
printed 100% OK
defect free

1597-E

mould with rubber pad sawed
into 1/2 inch square to 1/4 inch of edge.
Use white felt of standard felt to
1/4 inch thick sand on powder.
Press an 1261 schedule but leave
steam on 7 minutes instead of
6 minutes.

Make 48 blanks
varnish and print regular -
Send to Miller -
Thrust on edging.

Send 24 to miller 2 1/2

These used blanks
prints covered by
100% - 48 blanks
80% - Blanks were
cheap -
59% OK out of 26 Blanks.

Rebasing Report
of 4. 10% 4 19
24 6

Total 3 79.2%

6/22/17

1599-E Michel Mordet Experiment
Every body love a Jazz Band Michel Mordet

54 51-C-5-12
30th print) At start, fair invasion gets
good. He bracelets his Mucos!

60th print Start OK. Larders good no bacteria
375th print Very soft English

6/22/17

1600-E Michel Model Experiment
Identification # 3762-13-9-44
3rd print. Good Grey Surface.
40th print. Good Surface No scratches.
246 print. Very soft some places scratched

6/22/71

1601-E Nickel Metal Experiment -
Americium 244 is only by 544-0387 x

20th fruit big and as near 5 mm is -
surface fine, only 1, cracked in muscle
considerably in -

75 fruit surface very good.

150 mm Soft Surface.

253 fruit Surface Soft.

1602-E Michel Mordet Experiment
Every body comes a Grand Borel.

14 5451-B-1
20th Fruit Sugar Wood for experiment
a strip
40th Fruit Sugar Wood for experiment a strip
80th Fruit Sugar Left
313th Fruit Sugar Left

6/22/17

1591-E Duplications

OR 2A	X	OR 2A	X	Drop test	Caliper points
OR 2A	X	OR 2A	X	1. — 8	.223
OR 2A	X	OR 2A	X	2. — 6	.230
OR 2A	X	OR 2A	X	3. — 3	.223
OR 2A	X	OR 2A	X	4. — 20	.220.1
OR 2A	X	OR 2A	X	5. — 20	.213
OR 2A	X	OR 2A	X	6. — 20	.220.1
OR 2A	X	OR 2A	X	77 times	
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		
OR 2A	X	OR 2A	X		

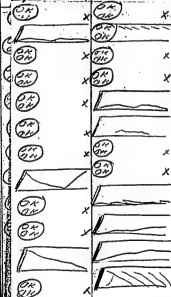
100% 91%

100% 91%

95.8

6/25/17

1604-E



Drop Test	Caliper
1. - 1	.205.1
2. - 1	.203
3. - 2	.209.1
4. - 9	.203.1
5. - 20	.22.0
6. - 2	1931

35 times

Edging Report 88.5%

75% 50%

75% 41%

(62.5)

1604-E Moulded rubber pad with
air - 1/2 rings and cross cuts to vent
inside. Standard felt & white
felt laid on. powder
Make 500 - send 24 to Miller -

92% OK and blackness
73% OK out of 461 Records

6/25/70

1605-E

OK 24	X	OK 24	X	Drop Test
OK 24	X	OK 24	X	1. — 2
OK 24	X	OK 24	X	2. — 5
OK 24	X	OK 24	X	3. — 5
OK 24	X	OK 24	X	4. — 8
OK 24	X	OK 24	X	5. — 9
OK 24	X	OK 24	X	6. — 2
OK 24	X	OK 24	X	31 times
OK 24	X	OK 24	X	Edging report 83.3%
OK 24	X	OK 24	X	1605-E 1334-E
OK 24	X	OK 24	X	78% OK out of 264 Records
OK 24	X	OK 24	X	100% OK on Blanks
OK 24	X	OK 24	X	Edging Report 89.5%
OK 24	X	OK 24	X	91% 83%
OK 24	X	OK 24	X	91% 83%
OK 24	X	OK 24	X	87.5%

1605-E

Same pad as 1604-E but
use 1/8 perforated sheet rubber
laid on powder -
Mach 500 sand 24
to mill

Industrial Report.
73.9% OK out of 596 Records.
88% OK on Blanks.
80.5% OK out of 7300 Records
84% OK on Blanks.
80.2% OK out of 13, 858
88% OK on Blanks.
71.4% OK out of 1004 Records.
92.2% OK on Blanks.
69% OK out of 543 Records.
80% OK on Blanks -

This is not 1605-E
it is a slight modification
of 1620-E

1606-E

OK 21	X	OK 24
OK 22	✓	OK 25
OK 23	X	OK 26
OK 24	X	OK 27
OK 25	X	OK 28
OK 26	X	OK 29
OK 27	✓	OK 30
OK 28	✓	OK 31
OK 29	✓	OK 32
OK 30	X	OK 33
OK 31	X	OK 34
OK 32	X	OK 35
OK 33	X	OK 36
OK 34	X	OK 37
OK 35	X	OK 38
OK 36	X	OK 39
OK 37	X	OK 40
OK 38	X	OK 41
OK 39	X	OK 42
OK 40	X	OK 43
OK 41	X	OK 44
OK 42	X	OK 45
OK 43	X	OK 46
OK 44	X	OK 47
OK 45	X	OK 48
OK 46	X	OK 49
OK 47	X	OK 50
OK 48	X	OK 51
OK 49	X	OK 52
OK 50	X	OK 53
OK 51	X	OK 54
OK 52	X	OK 55
OK 53	X	OK 56
OK 54	X	OK 57
OK 55	X	OK 58
OK 56	X	OK 59
OK 57	X	OK 60
OK 58	X	OK 61
OK 59	X	OK 62
OK 60	X	OK 63
OK 61	X	OK 64
OK 62	X	OK 65
OK 63	X	OK 66
OK 64	X	OK 67
OK 65	X	OK 68
OK 66	X	OK 69
OK 67	X	OK 70
OK 68	X	OK 71
OK 69	X	OK 72
OK 70	X	OK 73
OK 71	X	OK 74
OK 72	X	OK 75
OK 73	X	OK 76
OK 74	X	OK 77
OK 75	X	OK 78
OK 76	X	OK 79
OK 77	X	OK 80
OK 78	X	OK 81
OK 79	X	OK 82
OK 80	X	OK 83
OK 81	X	OK 84
OK 82	X	OK 85
OK 83	X	OK 86
OK 84	X	OK 87
OK 85	X	OK 88
OK 86	X	OK 89
OK 87	X	OK 90
OK 88	X	OK 91
OK 89	X	OK 92
OK 90	X	OK 93
OK 91	X	OK 94
OK 92	X	OK 95
OK 93	X	OK 96
OK 94	X	OK 97
OK 95	X	OK 98
OK 96	X	OK 99
OK 97	X	OK 100

Photo Test

1. — 5.
2. — 20.
3. — 1
4. — 1.
5. — 4
6. — 20

5.1 times

Edging Report 100% OK
" " 97.20%

On only 14 records

91%	83%
-----	-----

75%	83%
-----	-----

87.5

1606-E

Same as 1604-E except
that pad is used directly
on the powder -
send 24 to mill -
make 84

6/26/17

1607-E

Drop Test	Calif. per inch
1. — 2	.001
2. — 3	.009
3. — 4	.220
4. — 00	.2041
5. — 8	.630
6. — 13	.630
49	

Edging Report 932%

15-1% OK out of 328
13% OK on Blanks

58% 66%

50% 50%

62.5%

1607-E

Same as 1605 except that
Rubber pad is $\frac{1}{8}$ inch thick -Make 500 Blanks -
Send 24 to Miller -77% OK out of 3537 Records
93% OK on Blanks76.5% OK out of 448 Records
86% OK on Blanks84% OK out of 5939 Records
90% OK on Blanks84% OK out of 2714 Records
84% OK on Blanks84% OK out of 7331
91% OK on Blanks

1607-E.9 A.P.

77% OK out of 3140

78% OK on Blanks

74% OK out of 1373 Records

95% OK on Blanks

6/28/17

1608-E

Drop Test	Calipers found
1- 12	230
2- 20	217.1
3- 20	228
4- 20	199.1
5- 16	215
6- 16	

74 times

Edging Report 752

100% 91°
100% 83°

95.8°

1608-E

Make 500 blanks using the
hard felt of Amer. Felt Co. with
the 1/2 inch pad with circular grooves
moulded in (1604-E)

Send 24 ~~blanks~~ to Miller

90% OK records out 461
87.3% OK no blanks.

70% all thru

6/28/17

1609-E

[illegible]

Drop Test . Caliper points

x 1. — 2	.213
x 2. — 20	.217.
x 3. — 9.	.212
x 4. — 10.	.223
x 5. — 20	.213
x 6. — 20	.213

81 times

Edging Report 53.1%
on 49 records

100° 100%

100% 100%

100%

1609 E

Make 72 blanks using same
pad as 1606-E but laid on
powder like the thin pad and
not cemented to press.
Send 24 to Miller -

90.2% Off on 54 Records
97.2% Off on Banks.

6/29/17

16.11-E

Drop Test	Calif. Perf. Unit
1. —	22.0
2. —	22.3.1
3. —	21.3.1
4. —	21.5.1
5. —	21.2.1
6. —	23.0.1

Edging Report 81.1's
- 1163 records -

100%	91%
100%	91%

95.8%

1611-E

1611-E with W.G. Poirier
Make one drive 1505-E powder
Mould 1605-E -
Send 24 records to Miller.

93380: out of 1160 (100%)
90480: out of 1160 (100%)

Sec 1612 better with E Krim except
blanks

6/28/4

1612-E

Drop test	Calypso prints
1. — 4	.215.1
2. — 20	.216
3. — 6	.225.1
4. — 11	.216
5. — 5	.207.1
6. — 5	.210.1
38 times	
Edging Report 884%	

91% 91%

91% 91%

91.6%

1612-E

Make one drier 1505E powder
with E. Proain mould 1605-E
Send 24 records to Miller,

89% OK out of 68X records.
70% OK out of 68X records.

1615-E

[illegible]

5-0%

83%

66%

91%

41%

53%

66%

91%

72.9

1615-E

Mr. Kircher -

Table 48 blanks 1605-E
and varnish and bake twice
same as 1531-E

Send all 48 to Miller then
Send Miller report on edging.

6/28/11

1616-E

	91%	100%	100%
91%	100%	100%	100%

97.2%

Draft Test

1	20
2	20
3	20
4	20
5	18
6	1

99. train.

Caliper points

$.20\frac{1}{8}$
 $.216$
 $.223.1$
 $.215$
 $.213$
 $.218$

1646-E

Duplication of 1,597 except
that perforated this number
sheet is used instead of felt.
Make 48
Send all to Miller
Only received 36 boards.

Did you load this -
like 1610 E
with preliminary circles
person p.m.
I was about same
drop test -
NO!!
WHO!

6/29/17

1610-E

Bekne

Alfred Test

July 20

20

3. — 20

4. — 20

5-20

6-9

109 times

1610-E carried out correctly

(10) before & not after - striking off
in loading
troops

This was done very differently from what was intended - Instead of using the tool as in 1572 - by pressing the tool down several times - it was pressed down firmly only once - probably the cause of all of the records being wedge shaped. This error was not made in the 1410 where the operation was performed after striking off round in the hopper -

Demowidolfe -

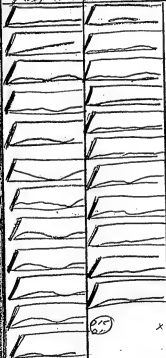
1610 should be duplicated

as it originally was (c) wrongfully
tool used after strike off -

 Σ

6/29/10

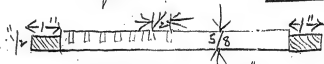
1618-E



8 1/8

8 1/8













1618-E Special Pad 48 Blunters



Central part of pad $\frac{5}{8}$ " thick
sawed into squares $\frac{3}{4}$ " deep
saw cuts $1\frac{1}{2}$ " C-C and $\frac{1}{8}$ " wide saw.
Use $\frac{1}{8}$ " thick perforated
sheet rubber pad -

Send all to miller -

CHS

Drop Test.	
1. 	20
2. 	20
3. 	18
4. 	20
5. 	6
6. 	4
7. 	20
8. 	20
9. 	1
10. 	20
11. 	20
12. 	18
<u>187 times</u>	
for b-average $9 \frac{3}{4}$ drop test	

1619-E

regular 1605-E

Take 12 records, discarded for being dislodged too much - and make four complete drop tests to see if weakness may be caused by the same thing. The records dislodged more than 84 are discarded.

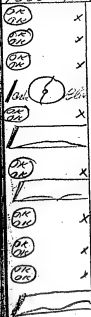
Evidently dislodging
not cause of weakness

16199

Dec 15 72 E Toof in loading powder
from Hoppen + others

1113

1620-E-1605-E



66%

66%

1620-E-1610-E

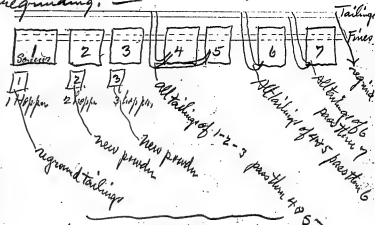


16%

16%

1620-E

Run screens for 5 hours with
reground tailings in no. 1 hopper and
reground all tailings so that no tailings
are over thru the screens again without
regrounding.



send 48 to Miller for inspection
and drop test. moulded 1605-E

Send 48 to Miller for inspection
and drop test moulded 1610-E

Send 200 Polawkes moulded on
1610-E to Kirdin for special
tests to compare surface

7/2/17

1620-E-1605-E

Rhop Test	
1.	30
2.	8
3.	7
4.	20
5.	23
6.	75

66%	100%	91%
-----	------	-----

66%	91%	91%
-----	-----	-----

Inspection Report
82% OK out of 457
78% on Plankton.

86.1

7/2/17.

1680-E-1610-E

Drop	Test
1. —	3.
2. —	2.
3. —	6.
4. —	6.
5. —	8.
6. —	8.
	<u>33.</u>

Edging Refractor

5.2.5

50%	50%	58%
-----	-----	-----

50%	50%	58%
-----	-----	-----

Edging Report
FBI

1621-E



Drop Test

- 1-20
- 2-4
- 3-18
- 4-20
- 5-20
- 6-10

9.3 times

86% O.K. out of 73 Bleeds

94% on Blanks

1621-E-B

85% O.K. out of 73 Bleeds

92% O.K. on Blanks

Edging Report
(83.2%)

91%

100%

Inspection

73% O.K. out of 73 Bleeds

91%

100%

92% O.K. on Blanks

(85.8)

1621-E

Make 5 driers full

Same as 1505-E mixture but $\frac{1}{2}$ Norway ^{wood}

Dried like 1508-E - short schedule

Ground and screened like 1620-E

Moulded like 1610-E using wire

disc before striking off in hopper

Press on 1261 Schedule but blow

steam on 7 minutes instead of

6 minutes

Barnish and print regular

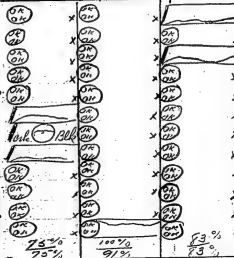
send 48 Bleeds to Miller in

Building 7 - also complete

report on discards thru factory

1621-E-B WRONG WAY WITH TOOL

7/3/12



Drop Test

1-19

2-17

3-20

4-3

5-3

6-20

8.3 times

Edging Report

(84.5%)

73%

73%

100%

91%

73%

73%

C115

7/3/17

1623-F NO. 1

16.11.19 - F. Rindler

proper way

Drop test

1-4

2-20

3. — 4.

4. — 20

51

6-1-80

4

4 8 times

75%

1622-E

Duplicate of 1610-L
Sent 36 prints to Miller

(is after stripping off)

1610-E-B' Don't Miss! Moving 11/11

7/8/17

Drop's test

1-20

2-20.

5-1

4-7

5-20

6-20

20
88 times

(777)

7/7/77

1623-E

Calipers prints	Drop test	
1	1	.221
2	2	.223.1
3	2	.224
4	1	.208.1
5	4	.226
6	3	.225.7
13 times		
Edgering Report:		
Total % Ok. 43%		

100% 91%

100% 91%

(958)

1623-E

Make 5 drivers full- I Proin
 Same mixture as 1505-E. Use $\frac{1}{2}$ Norway
 wood. Dried regular.
 Grind and screen like 1620-E
 Mould with wire disc operated after
 stroke off by extra man. ^{with concentric ring}
 Use $\frac{1}{2}$ inch rubber pad on packing
 press. Use $\frac{1}{8}$ inch perforated sheet
 rubber.
 1261 Schedule ~~except for~~
~~not to be substituted for~~
 Varnish and paint regular
 Send 24 records to Muller.

7/7/77

1624-E

Draft Test : Analysis Units

1.	—	2	230
2.	—	6	,223/
3.	—	4	,235
4.	—	3	,221
5.	—	2	,223/
6.	—	3	,225

20 times

Edging Report - 60 s
2 d & Band

95.8%

1624-E

1624-E
Make 5 drivers full.
Same as 1623-E except use
E. Proin.

7/7/17

1625-E

OK
OK
OK
OK

$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$
 $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$

$\begin{pmatrix} 24 \\ 02 \\ 24 \\ 24 \end{pmatrix}$
 $\begin{pmatrix} 24 \\ 02 \\ 24 \\ 24 \end{pmatrix}$

Medical College

OK
OK

X

OK
OK

X

OK
OK
OK
OK

01-24
 01-24

100

91.

x	Drop Test Caliper points	
x	1 — 2	233.1

$$\begin{array}{r} \times 2, - 3 \\ 3, - 2 \end{array} \quad \begin{array}{r} .2331 \\ .228 \end{array}$$

$\begin{array}{r} x \\ 4. - 3 \\ x \\ 5. - 7 \end{array}$

122317
18 times

Edging Report 68⁵/₅

100

x	
---	--

1

Figure 1

1625-E

Make 5 drivers full
Same as 1623-E except use
W.C. Rossin.

Same as 1623-EO except use
W. Co. Rosin.

W. Co. Rosin.

7/7/53

1626-E

Drop Test	Caliper
1. — 3	.203
2. — 5	.199
3. — 4	.213.1
4. — 3	.207
5. — 3	.210
6. — 1	.203

18 times

Edging Report.

total % Dk. 37%

1626-E

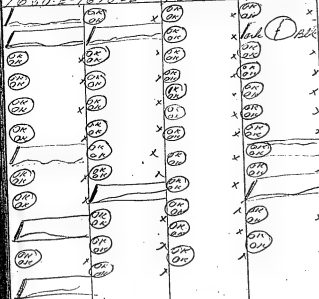
500 (1623-E blanks except
hold stain on press 7 min instead
of 6 min as in 1261 schedule)
Send 48 to Miller and full
report from factory.

7/5/77

7/5/77

1630-E-1610-E

1630-E-1605-E



70.5

Drop Test

1-20
2-10
3-10
4-17
5-11
6-11

64 times

91.5

Drop Test

1-20
2-20
3-18
4-7
5-20
6-10

95 times

1629.E

[illegible]

95.88

Edging Report

total % 74%

Inspection Report

93% Percent of 74 Records

75% Oken Blau.

Drop test

$$\frac{1}{1} - \frac{1}{2}$$

2-8

3-7

4-11a

5-2

$$6 \overline{) 4}$$

33 times

Caliper points

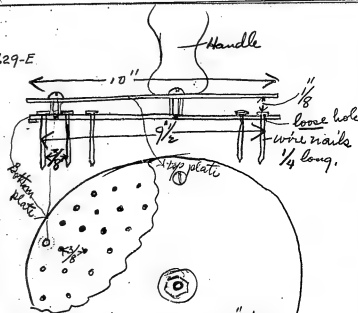
229 234

229.1... 225.

227.1 | 217.1

7/7/12

1629-E



Wire nails $\frac{3}{8}$ " - C-C all over $9\frac{1}{2}$ " circle

Use same as 1572 tool in packing the powder in place of the wire mesh

Make 100 plants using this tool after
strike off in loading hopper

send ~~#1~~ to barnick & split regular
send #8 to miller,

If the trouble is electrostatic this tool should work better than wire mesh.

1630-E



(937)

Edging Report

Total% OK 58 1/2%

OK	TURNER	OK
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x
x	OK	x

Drop Test

1.	20
2.	20
3.	3
4.	20
5.	1
6.	20
	8 4/100

7/7/17

1630-E

Mr. Kishner -

Got a quart of varnish from
Hoffman - without any filler
and varnish the edges and
center of about 200 blanks
immediately before the regular
coat of varnish is applied.
Send 14 rounds to Miller for
inspection and drop test.
Have careful record of edge
inspection and center-hole chips
to be entered in Mr. E's book.

7/7/17

1631-E

[illegible]

91%

100 %

70.0%

91%

9/5

1000

Drop Test

1.	—	8
2.	—	15
3.	—	20
4.	—	20
5.	—	4
6.	—	3

7-0 times

1631-E

Same as 1630-E but varnish
blanks all over instead of edges and
center only.

Make 148 - send to Miller for inspection - After inspection have them edged and record made in two books -

7/15/18

1639

[illegible]

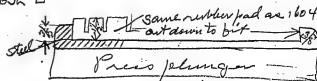
52%

Edgemoor Report

Calypso			19 June		
Collected	Mr.	Mr.		Calypso	Points
1st Cont 79	53	24	2		
2nd "	24	13	2	233.1	224.1
3rd "	9	5	4	214	213
	71		8	204.1	200

90%

1632-E



we provided perforated pad, 1/8 inch -
Make 200 blanks with same powder as
1620-E - varnish and print regular
Send 48 records to Miller -
Report on edge inspection as
soon as possible.

7/12/17

1634-E



62.5

Drop Test

1. — 5
2. — 3
3. — 1
4. — 4
5. — 1
6. — 1

15 Miles
Califco Point

- 2052 . 220
- 2101 . 222
- 2111 . 226

1634-E

Same as 1632-E except that the steel ring is turned out $\frac{1}{8}$ inch more and rubber is $\frac{1}{8}$ inch larger in diameter. ring is $\frac{1}{8}$ inch wide instead of $\frac{3}{8}$ inch wide.

Make 200 plants

Send 48 records to Miller.
Report on edge inspection as soon as possible.

Edging Post. 87°

1636-E

Blank mould ring with $\frac{1}{16}$ radius
fillet to prevent flange
from breaking off.
special round
edge bottom plate
to fillet. Put in

service July 12-17
August 10 found to be OK -
started to make this standard,

1637-E

OK	OK		OK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Edging Report.			
Edging	Pk.	Bedding	Fin.
19	13	5	1
5	2	3	
3	2		
	<u>17</u>		<u>1</u>
			2

90% OK


1637-E

wood disc 10 1/4 diam.
with 1/2 inch soft rubber tubes
5/8 inside diam., projecting from
face all over (139 tubes)
9 3/4 inch circum.



After striking off
mould in hopper
this tool is vibrated
up and down 60
times while rotating

by hand over the world.
Press on 1261 schedule, vanish
and print regular; send all
to Miller - 25 made -

inspection - drops test - edging -
centers seem a little soft.
All too thick -
Edging report 5625? 



C153]

1605-E

[illegible]

95.5%

The above two loads were taken from the unit entirely without notice.

7/13/17

1637-E

✓ OK
7A.
ON
20.
OK
21.
X ON
22.
X OK
23.
Y OK
24.
Y OK
25.
X OK
26.
X OK
27.
Y OK
28.
X OK
29.
X OK
30.

95.8% Perfect.
100%

The above two loads were made from the same unit, ~~and~~ The two previous were taken as a check.

7/14/41

1640-F

OK	x	FERNS	Drop test	
OK	x	OK	1	20 times
OK	x	OK	2	2
OK	x	OK	3	17
OK	x	OK	4	20
FERNS		FERNS	5	3
FERNS		FERNS	6	1
OK	x	FERNS	63 times	
OK	x	OK	Calif. Print	
OK	x	OK	.223.1	.217
FERNS	x	OK	.225	.216
OK	x	OK	.222	.220
FERNS		FERNS		
OK	x			

62.5

Edging Blot
Edged OK. Edged. Also
10 Blot/6 12 3 1
2 3 1
12 4
75% Edged.

1640-E

Make 24 blanks regular
1261 schedule except 75 lbs
pressure and keep steam on
for 8 minutes.
Varnish and print regular

7/15/47

1641-E

FERNs

FERNs

2nd 1

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

FERNs

10 blanks cracked after compressing process.

Drop test

1. —
2. —
3. —
4. —
5. —
6. —

California

Edging Report

78.6% OK

Edged	OK	Edged	OK
1st 14	11	2	1
2nd	2	1	1
3rd	1	1	1

1641-E

Make 24 blanks regular 12 by schedule
except 850 lbs. pressure
varnish and print - regular

6150

7/14/77

1643-E

(OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)
 (OK) x (OK)

Drop Test

x 1. — 2
 x 2. — 2
 x 3. — 3
 x 4. — 8
 x 5. — 3
 x 6. — 5

33 trials

Revised Data

x .201
 x .219
 x .221
 x .215
 x .223
 x .234

100

1642-E

Make 24 blanks regular except
 press on old schedule 1, 2, 3, 8 —

7/14/17

1643-E

20	20	Drop test
20	20	
20	20	
20	20	
20	20	
20	20	
20	20	1. — 3
20	20	2. — 10
20	20	3. — 3
20	20	4. —
20	20	5. — 20
20	20	6. —
		48 times

Box	Count	Calif. Prints
2A	2A	325
2A	2A	328
2A	2A	329
2A	2A	330
2A	2A	331
2A	2A	332
2A	2A	333
2A	2A	334
2A	2A	335
2A	2A	336
2A	2A	337
2A	2A	338
2A	2A	339
2A	2A	340
2A	2A	341
2A	2A	342
2A	2A	343
2A	2A	344
2A	2A	345
2A	2A	346
2A	2A	347
2A	2A	348
2A	2A	349
2A	2A	350
2A	2A	351
2A	2A	352
2A	2A	353
2A	2A	354
2A	2A	355
2A	2A	356
2A	2A	357
2A	2A	358
2A	2A	359
2A	2A	360
2A	2A	361
2A	2A	362
2A	2A	363
2A	2A	364
2A	2A	365
2A	2A	366
2A	2A	367
2A	2A	368
2A	2A	369
2A	2A	370
2A	2A	371
2A	2A	372
2A	2A	373
2A	2A	374
2A	2A	375
2A	2A	376
2A	2A	377
2A	2A	378
2A	2A	379
2A	2A	380
2A	2A	381
2A	2A	382
2A	2A	383
2A	2A	384
2A	2A	385
2A	2A	386
2A	2A	387
2A	2A	388
2A	2A	389
2A	2A	390
2A	2A	391
2A	2A	392
2A	2A	393
2A	2A	394
2A	2A	395
2A	2A	396
2A	2A	397
2A	2A	398
2A	2A	399
2A	2A	400

Edgemoor Report

Edw. Dr. McEwen Alice

1st Cut	43	25	17	1
2nd Cut	17	9	7	1
3rd Cut	7	<u>4</u>	-	<u>3</u>
		38		4

88. 3% O.K.

1643-E Make 24 blanks regular
1261 schedule except keep steam
on for 8 minutes.

100%

7/15/17

1644-E

24	x	24	x
FERNs		FERNs	
FERNs		24	x
FERNs		24	x
FERNs		OK/over 3	
24	x	24	x
FERNs		FERNs	
24	x	FERNs	
24	x	FERNs	
FERNs			
FERNs			

47.6%

3 Hanks made of 250 cones, 1000 ft. each.

Edging Report

90.5% OK

Edged OK. 24 Hanks

1st Cut 21 14 5 2

5 5

1644-E

Make 24 blanks regular 1261
schedule except 700 lbs pressure
varnish & print regular -

1645-E

7/15/25

$\frac{ON}{ON}$	x	Deep test	Bale/wr per.
$\frac{ON}{ON}$	x	1 — 7	.221.1
$\frac{ON}{ON}$	x	2 — 3	.227.1
$\frac{ON}{ON}$	x	3 — 10	.213
$\frac{ON}{ON}$	x	4 — 20	.225
$\frac{ON}{ON}$	x	5 — 1	.228.1
$\frac{ON}{ON}$	x	6 — 7	.201
<u>48 times</u>			

48 trees

Edging Report

58% OK

Edred O.K. Redgird Alice

1st Cut 20 15 3 2

2nd Crk 3 1 2

3rd Oct 2

4. Number of cases of the disease.

90%

1646-E

Make two blanks regular
schedule out of powder that has
been run thru lumber rolls
(ordinary clothes rings)

3 Picado OK for samples.
Surface good and has a nice
bad River Cut and can not
see it.

Drop Test - 20-20

1647-E

Make two blanks out of
regular soft blanks that have
been ground up to fairly coarse
powder - say 20 mesh.

7/14/17

1648-E

Drop test

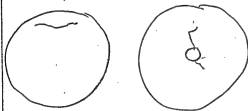
Caliper point

1648-E Duplicate of 1646-E

Only instead of remaining a
Hanks will make 13

1648-E	X	1. —	20	.339.1
1648-E	X	2. —	20	.225
1648-E	X	3. —	20	.233
1648-E	X	4. —	20	.235.1
1648-E	X	5. —	20	.219.1
1648-E	X	6. —	20	.233
			<u>120</u>	

3 Hanks cracked after carrying out of view.



Crushed, showing angle -

1649-E

7/16/42

1651-E

24

x

Drop Test

Caliper Point

24

x

1. — 14

.226

24

x

2. — 15

.217.1

24

x

3. — 20

.222.

24

x

4. — 7

.228.1

24

x

5. — 1

.224.1

24

x

6. — 7

.223

24

x

64 lines

24

x

24

x

24

x

24

x

24

x

83%

Edging Report

Edged Ok. & Edged Wire

10

6

3

1

3

1

1

1

1

4

2

80% Ok.

1651 Powder cold
12 blanks 50%

Interlocks 100%

1651-E

Raw line regular 100%

100%

1652-E

7/15/17

1652-E

make 24 blanks on old schedule.
except pressure 500 lbs instead of
600 lbs on blank press

	Knops Test	Calogian Points
1. —	50	.234.1
2. —	20	.237.1
3. —	15	.233.1
4. —	16	.227.1
5. —	20	.243.1
6. —	20	.236.1
	111 turns	

Edging Report.

Edged	Ok	ReEdged	Dis
15	8	5	2
5	1	3	1
3			3

100%
reproduction

7 Harbor Pass of the incoming frame over.

7/15/17

1654-15

[illegible]

90.9

Drop Test

1-20

2. — 20

3. — 8

40 — 20.

$s_i = 10$

6. - 20

98 Lines

Calibes Point

228' 224'

234.1 . 222

235.1 .222

1654-E

Marched 1605-1608 -

This is more like 1620-E than all of the tailings are not ground. Tailings are ground when percent of fine passing thru 100 mesh screen is 100. 1620 was 50% with 1605 - this was about 20% when tailings were reground. This is dried like 1805 -

0992

7/15/17

16.55-E

[illegible]

98.5

1655-E

1510 powder dried like 1508 -
screened like 1654.

7/15/17

1656-E

(2A)	x	FERNS	Drop Test
FERNS	FERNS	1.	11
(2A)	x (2A)	2.	20
(2A) Part 1	FERNS	3.	20
FERNS	FERNS	4.	20
(2A)	x	5.	20
(2A)	x	6.	20
FERNS	FERNS		111
(2A)	x (2A) Part 2	Edging Report Edged. On ReEdged Wire	
(2A)	x (2A)		
(2A)	x (2A)		
(2A)	x (2A)		
(2A)	x (2A)		
(2A)	x	23	18
(2A)	x	5	4
(2A)	x	1	-
FERNS		13	1

96% OK.

57.3

1656-E

Repeat 1639-E except in printing
keep stems in 5 minutes longer and
do not press one extra time.

- (1) One theory is that finer grinding makes more surface and consequently requires more rosin to stick the particles together. Reasoning on this we would expect to find that a larger proportion of chalk relative to wood flour would require more rosin.

The above does not consider the thickness of the coat of rosin on the particles. We know nothing whatever about this factor.

- (2) Another theory is that the chalk is used to fill the spaces between the larger particles of wood and that the rosin is to fill the remaining spaces. If this is the true principle the grading of the particles is the most important factor.
- (3) The hydrostatic pressure probably affects the fluid rosin thru surface tension before all of the spaces are filled. Some condition of the powder affecting this surface tension may be the governing factor.

Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 23
Notebook, N-17-07-15

This notebook was used by William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters during July-August 1917 for notes on efforts to improve Edison disc records. There are occasional comments by Edison on the work performed. The entries pertain primarily to a sequence of experiments numbered from 1657E through 1749E. Included are tests of experimental lots of record blanks constructed by different methods or prepared with different ingredients. The entries generally consist of instructions by Dinwiddie or Hoffman describing the experimental records wanted, accompanied by evaluations of the test records based on their durability, thickness, and edging. One entry toward the end of the book gives a "Schedule of Operations" involved in pressing records. The front is labeled "Disc Record" and "23"; the back cover is labeled "23." The pages are unnumbered. Approximately 200 pages have been used.

O'Connors. *firmans.*
Connolly. *firmans.*

73498

Leone Co.,

REC. STATIONERS,
25 JOHN ST.
AND
10 PLATT ST.
NEW YORK.

1657-E

65 lbs wood -

35 lbs chalk -

12 lbs Rosin - I grade

50 lbs Alcohol -

Make one drier full -

Test for surface all samples
made from this powder -

Powder to be dried regular
and screened regular (1654-E)
(tailings reground when they reach
50% fine)

Surface of Records printed on
same nichol moulds - are scarcely
any harder than regular - but seem
to be a little harder, ~~and~~

7/15/77

1658-E

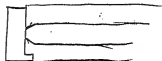
		Drop Test	Only 100 Point
1 -	2.0	.235.1	
2 -	2.0	.232.1	
3 -	2.0	.237	
4 -	3	.219.1	
5 -	2.0	.243	
6 -	2.0	.236	
103 times			

Edging Report
All Edges 100%
on first cut.

100% Hardness - 100% Edge

77.7%

1658-E



Special blank mould to level
edge of blank -
Make 48 blades send to
Miller - Also report on edging.
Should harden ~~the~~ edge slightly.

Only make 18 blades.

Only one 1 blank
1 slip had a groove in it
other slip perfect -
varnish straight
wood.

7/15/72

1659-E

- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
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- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)
- (2A) (2A)

x	Drop Test Calipers	
x	1. — 1	.227.1
x	2. — 5	.224.1
x	3. — 20	.224
x	4. — 19	.222
x	5. — 20	.223
x	6. — 15	.227.1

8 0 times

Edging Report

Edg	Ok	Bl Edg	None
23	4	19	
4	1	3	
1		1	

100%

100%

Edg	Ok	Bl Edg	None
56	40	13	3
13	10	3	
3	3	1	
	52	4	

93% Ok

1659-E

Made 100 blanks 1261 scheduled from 1657-E ~~not~~ powder - finish and print regular - send 24 to Miller. Report on edging of all -
 => Edg Inspected
 91.3% Ok out of 28 Records.
 96.5% Ok out of 55 Records

7/16/77

1661-E

20	x	20	x	Drop test:	
20	x	20	x	1	4 .221
				2	4 .210.1
				3	2 .219
				4	4 .227
20	x	20	x	5	1 .213
20	x	20	x	6	1 .224.1

16 times

Erasing Report.
Paint OK. Redd Air.

32	20	8	4
8	6	2	
2	2		
28			4

84.8%

43.9%

1661-E

$\frac{1}{8}$ "  regular rubber pad with ring of $\frac{1}{8}$ "

$\frac{1}{8}$ " Steel band $\frac{1}{8}$ " around pad
to make edges a little wider.
band is same height as pad.
Make 100 blanks regular
powder -
Send 24 to Miller.

7/10/77

63.6

OK	✓	Drop test (air pressure)	
OK	x	1. 5	215.1
OK	x	3	214.1
OK	x	4	224.1
OK	x	3	218
OK	x	7	219
OK	x	1	217
OK	x	31 times	
OK	x	Edging Report	
OK	x	Edge OK. Edge Min.	
OK	x	40 06 11	3
OK	x	11 5 5	1
OK	x	5 5	4
OK	x	36	

63.6

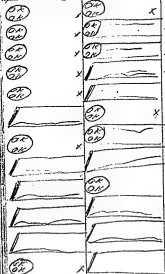
90% OK

1662-E

Same as 1661-E except
use 1657 powder.

7/10/5

1663-E



Drop test Calypso Bonds

1.	2.	.219.1
2.	5.	.232.1
3.	5.	.205.
4.	11.	.236
5.	3.	.252
6.	3.	.221

28 times

Edgins Report

Edgins	OK	ReEdgins	OK
11	9	12	
2	2		
	11		

100% OK

Edgins	OK	ReEdgins	OK
35	21	12	2
12	9	2	1
2	1		1
	31		4

98.5% OK

1663-E

Same as 1661 except
one 1261 schedule held, steam 7 minutes

7/16/17

1664-E

Handwritten notes on lined paper showing a list of numbers in circles, some with letters X, Y, and Z next to them, and some with horizontal lines through them.

Left Column	Right Column
2A	2A
2B	2B
2C	2C
2D	2D
2E	2E
2F	2F
2G	2G
2H	2H
2I	2I
2J	2J
2K	2K
2L	2L
2M	2M
2N	2N
2O	2O
2P	2P
2Q	2Q
2R	2R
2S	2S
2T	2T
2U	2U
2V	2V
2W	2W
2X	2X
2Y	2Y
2Z	2Z

Pro, 1/2-test Cases: Points

1	1	224.1
2	2	220
3	3	221.1
4	4	218
5	6	229
6	6	221.1
22 times		

32 times

Edging Report
Edging Mt. & Edging Mine

Edgar K. B. Edgar, Nino

35 26 19
9 6 3
3 3
35

100% OK.

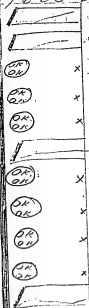
90.4%

Eye Inspected
42.6% OK out of 52 Records

16-64-E

Make 100 blanks with 1657 powder
but hold steam on 7 minutes,
send 24 records to Miller,

1665-E



Drop test

1. —
2. —
3. —
4. —
5. —
6. —

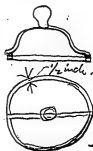
Edging Report.

Edged M. R. Edged W.

17	4	3	
3	1	2	
2	1		1
	6		1

85.7% OK.

1665-E



Make 12 blanks
press this ring
down in loading
hopper then
put more powder
in and strike
it again.

This was pressed down
5 times on each blank to
pack the powder on the
edges. —

(63.6%)

4/17/77

1668-E



Drop Test		Caliper Point
1.	16	.225.1
2.	9	.209
3.	1	.223
4.	14	.226
5.	6	.222.1
6.	9	.222
55 times		

Edging Report			
Edged	OK	Redged	Dir
49	30	19	
19	6	10	3
10	7		3
	43		6

8775 OK

29.1°

1668-E

Make 100 bladders like 1661 but leave out the thin rubber pad, and 24 to Miller - Report on inspection and edging after

7/17/77

1670-E



8585
replanting

Black Creek, 100 ft. west of
gate 2000.

Depth Test	Calcs. conts
1. 20	.223
2. 20	.245.1
3. 1	.228
4. 1	.233
5. 4	.220.1
6. 10	.215.1

56 miles

Edwin Report

Edge	OK	Re	Edge	OK
33	18	15		
15	7	7	1	
7	3		4	
	3		5	

84.83 OK

1670-E

Same as 1669-E except once the
1661 pad -
Send 24 to Miller.
Report on inspection and pricing
of all

17/17/15.

1671-E

Drop Test: Calypso Points	
1	30
2	1
3	3
4	6
5	10
6	8
48 tunic	

Edging Report.			
Edged	OK	Redged	Disc
52	14	6	2
6	0	4	
4	<u>2</u>		<u>2</u>
	18		4

81.53 OK.

1671-E

Same as 1668-E except with
500 pounds pressure on packing press.
Send 24 to Miller
Report on inspection and edging
of disk.

29 4%

reprinted

7. *Desmodium illinoense* Nutt. *Desmodium*

7/17/13

1673-E

	Dist. Tol	Gr. or Dist.
1. 3	.222	
2. 1	.222.1	
3. 10	.214.1	
4. 20	.214.1	
5. 8	.221	
6. 44	.216.1	
56 times		

Edging Report			
Edges OK	Below	Disc	
20	15	3	2
3	1	2	
2	2		
10			3

90° OK.

1672-E

Name as 1668-E but. prep steam in press for 7 minutes. Make 100 blunts - bend 24 to 70th. Report on inspection and edging of oil.

7-17-18 - (1675 1/2 E)

Hydraulic Packing press pressure
changed from 700 pounds
to 640 pounds - 1 psi

7/15/17

1676-E

Drop test	Caliper Point
1. — 3	.231.1
2. — 1	.215
3. — 6	.225
4. — 11	.226.1
5. — 3	.222.1
6. — 2	.222
26 blurs	

Edging Report
Edw. W. Miller, Ohio.

43	31	11	1
11	5	5	1
3	3		
41			

95.3°

Exp. Inspections
5214.5 Out of 52 Pieces

37.5%

1676-E Same as 1661-E except that
3/16 holes are bored opposite cuts
in pad thru ring — $\frac{1}{8}$
Make 100 blanks $\frac{1}{8}$

send 24 records to Miller

7/15/17

1677-E

Drop Test	Caliper Point
1- 5	.220.1
2- 5	.223.1
3- 17	.227.1
4- 19	.230.1
5- 7	.221
6- 3	.219.1
56 times	

Edging Report
Equal OK. at 100% Mic

48	31	15	2
15	10	4	1
4	3		1
44			4

91.4%













75%

1677-E Same as 1676 except that 5% rubber pad is used -

Exp. Suspectors
59% OK out of 81 hours

7/18/17

1678-E

		Knip kat	Calypso pants
		1 — 1.6	.227
		1 — 4	.2161
		3 — 10	.3221
		4 — 20	.312
		5 — 3	.320
		6 — 1	.2191
		54 times	

Edging Report
Edging (Old) ReEdg. Misc.

$$\begin{array}{r} 60 \\ 15 \\ 4 \\ \hline 79 \end{array}$$

96.6% OK.

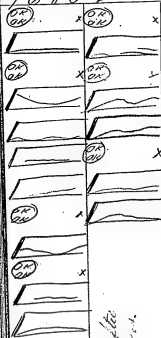
Exp. Inspectors
72.2% OK out of 53 Records

1678-E

1678-E Same as 1676-E except use
1666 powder -

7/20/17.

1680-E



35%
in printing

4 Hubs, sealed after
drawing from discs.

Drop Test Badgerpoint

1.	11	.215
2.	20	.212.1
3.	20	.206
4.	5	.215.1
5.	13	.216
6.	5	.220

74 times

444 inspected

185 OK

259 Discards (222 parallel)

1680-E

Make up sample of 2 bags wood
flour from Union Wood flour Co.
Make regular 1666-E

7/20/17

1681

OK
2/12

64

Drop test Saliferous Prints

1. — 5 .221.1

2. — 11

5- 1. 231/

4 221.1

5. —	2	1.226
	7	2.31

6. 7 .237

30 times

OK

Eye Inspected on

36. 7% Oct 27 81 6 Rem.

912

OK

L

215

五

LE

+

30.4

30. in practice

- 1681-E

Make up sample of wood from
from Lignum Chem. Co.
Make regular 1666-E

1683-E

[illegible]

OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK
OK

91.5%

Drop test Galapagos Point

1	20	2.14
2	20	2.05.5
3	16	2.16.5
4	20	2.12
5	20	2.10.5
6	20	2.32

116 Times

Edging Report
Edith M. Redwood

$$\begin{array}{r} 63 \quad 55 \\ 8 \quad \underline{8} \\ 63 \end{array}$$

100% OK.
Eye Suspect II
58.2% OK out of 67 Records

1683-E

60 lbs wood
40 lbs char.
13 lbs Rosin I Grade
50 lbs Alcohol
2 lbs gas black -
By Apr 1508
Wm. L. Parrish and joint
partner.
Same 100 shares for 1686

1683-E (D.L.)

[illegible]

7/25/12

1684-E

7/20/11

Deep tret. Caliper Point

OK
OKOK
OK

X

1. — 20 .214

OK
OKOK
OK

X

2. — 1 .218

OK
OKOK
OK

X

3. — 12 .224

OK
OKOK
OK

X

4. — 12 .214.5

OK
OKOK
OK

X

5. — 20 .225.5

OK
OKOK
OK

X

6. — 20 .210.5

OK
OKOK
OK

X

 $\frac{85}{85}$ timesOK
OKOK
OK

X

OK
OKOK
OKOK
OK

X

OK
OKOK
OKOK
OK

X

OK
OKOK
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OK

X

OK
OKOK
OKOK
OK

X

OK
OKOK
OKOK
OK

X

OK
OKEdging Point
Edging Pt. Bedget Point

26 18 5

5 2 2

2 1 1

2 1 2

80.70%

87.5%

1684-E

{1/2 Heavy}

Same as 1666-E except dried
on 1508 Schedule -
Mould, varnish and paint
regular -
Save 100 blanks for 1657-E

1685-E

Drop	Test	Caliper	Print
1	18		.001
2	10		.012
3	20		.204
4	3		.008
5	7		.219
6	10		.214

68 turns

68 turns

Edging Report.

Edged 100% OK

Exp. Suspension

42.3% OK and 59 Records

43

7/22/72

1685-E

Make 100 (1666-E) regular blanks
except hold steam on press
7 minutes instead of 6 1/2 minutes

1686-E



Drop test Gal./in. Points

x 1	— 20	220
x 2	— 20	216
x 3	— 20	222.5
x 4	— 13	214.5
x 5	— 20	212.5
x 6	— 20	217.5
		118 Times

Edging Point			
Edged	On	Edged	None
66	58	7	1
7	5		2
	63		3

(83.4%)

95.5% Of

Eye Inspected
40.5% of 345 Points
63.2% of 6.5 Points

Edging Point
Edged On. Or Edged None

135	130	6	2
6			
	136		

98.5% Of

1686-E

Make 100 blanks 1683 powder
~~but~~ keep steam on for 7 min
instead of six minutes

E63

1688-E

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

OK
OK

x

Drop test Pelican Points

x 1	— 11	.215
x 2	— 20	.222
x 3	— 11	.2200
x 4	— 20	.215
x 5	— 20	.214.5
x 6	— 17	.227
	<u>99 times</u>	

Edging Point
Edouard P. M. P. de la Rive

35	27	51
8	6	2
2	<u>2</u>	
	35	

100% O.K.

Exp. Disrupt. to
23.4.20 out of 362 Rem.

(66.1)

1688-E

Make 100 blanks 1683 powder but
keep steam on press 5 minutes
instead of 6 minutes.

E651

7/30/17.

1689-E

[illegible]

(9/10/6)

1689-E

1687-2 Make 100 slanks 166-E powder
but keep steam on press 5 minutes
instead of 6 minutes.

Eye Inspection
81.5% OK out of 65 Records
37.3% OK out of 806 Records. indec 238

1689-E Duplicate 7/24/77

See also 1691

7/23/17

1690-E

100 (1)

100 (1)

100 (1)

100 (1)

100 (1)

1690-E

Regular powder with 12% water -
Used regular loading press -

" " press for pressing.
Plaster hot to start pressure 600 lbs $\frac{1}{2}$ min
before turning off steam, water an
600 lbs pressure until cold.

Baked in oven at 230°

No 1 for 1 hour .065% loss in lot.

2	1 1/2	.078	" "	
3	2	.088	" "	Blotter N.G.
4	2 1/2	.117	" "	
5	3	.112	" "	
6	4	.129	" "	

7/23, 1/17

1691-E

Bad Luck Sort

LEFUS

FERIS

③K 2K x FERNS

②④



05 X 00

OR
OR

④

x	Drop test	Valifacprophets
1	20	198.1
2	3	210
3	14	222
4	10	234.1
5	1	199.1
6	20	213.1

6 8 11 14 17 20 23 26 29 32 35 38 41 44 47 50 53 56 59 62 65 68 71 74 77 80 83 86 89 92 95 98 101 104 107 110 113 116 119 122 125 128 131 134 137 140 143 146 149 152 155 158 161 164 167 170 173 176 179 182 185 188 191 194 197 200 203 206 209 212 215 218 221 224 227 230 233 236 239 242 245 248 251 254 257 260 263 266 269 272 275 278 281 284 287 290 293 296 299 302 305 308 311 314 317 320 323 326 329 332 335 338 341 344 347 350 353 356 359 362 365 368 371 374 377 380 383 386 389 392 395 398 401 404 407 410 413 416 419 422 425 428 431 434 437 440 443 446 449 452 455 458 461 464 467 470 473 476 479 482 485 488 491 494 497 500 503 506 509 512 515 518 521 524 527 530 533 536 539 542 545 548 551 554 557 560 563 566 569 572 575 578 581 584 587 590 593 596 599 602 605 608 611 614 617 620 623 626 629 632 635 638 641 644 647 650 653 656 659 662 665 668 671 674 677 680 683 686 689 692 695 698 701 704 707 710 713 716 719 722 725 728 731 734 737 740 743 746 749 752 755 758 761 764 767 770 773 776 779 782 785 788 791 794 797 800 803 806 809 812 815 818 821 824 827 830 833 836 839 842 845 848 851 854 857 860 863 866 869 872 875 878 881 884 887 890 893 896 899 902 905 908 911 914 917 920 923 926 929 932 935 938 941 944 947 950 953 956 959 962 965 968 971 974 977 980 983 986 989 992 995 998 1001 1004 1007 1010 1013 1016 1019 1022 1025 1028 1031 1034 1037 1040 1043 1046 1049 1052 1055 1058 1061 1064 1067 1070 1073 1076 1079 1082 1085 1088 1091 1094 1097 1100 1103 1106 1109 1112 1115 1118 1121 1124 1127 1130 1133 1136 1139 1142 1145 1148 1151 1154 1157 1160 1163 1166 1169 1172 1175 1178 1181 1184 1187 1190 1193 1196 1199 1202 1205 1208 1211 1214 1217 1220 1223 1226 1229 1232 1235 1238 1241 1244 1247 1250 1253 1256 1259 1262 1265 1268 1271 1274 1277 1280 1283 1286 1289 1292 1295 1298 1301 1304 1307 1310 1313 1316 1319 1322 1325 1328 1331 1334 1337 1340 1343 1346 1349 1352 1355 1358 1361 1364 1367 1370 1373 1376 1379 1382 1385 1388 1391 1394 1397 1400 1403 1406 1409 1412 1415 1418 1421 1424 1427 1430 1433 1436 1439 1442 1445 1448 1451 1454 1457 1460 1463 1466 1469 1472 1475 1478 1481 1484 1487 1490 1493 1496 1499 1502 1505 1508 1511 1514 1517 1520 1523 1526 1529 1532 1535 1538 1541 1544 1547 1550 1553 1556 1559 1562 1565 1568 1571 1574 1577 1580 1583 1586 1589 1592 1595 1598 1601 1604 1607 1610 1613 1616 1619 1622 1625 1628 1631 1634 1637 1640 1643 1646 1649 1652 1655 1658 1661 1664 1667 1670 1673 1676 1679 1682 1685 1688 1691 1694 1697 1700 1703 1706 1709 1712 1715 1718 1721 1724 1727 1730 1733 1736 1739 1742 1745 1748 1751 1754 1757 1760 1763 1766 1769 1772 1775 1778 1781 1784 1787 1790 1793 1796 1799 1802 1805 1808 1811 1814 1817 1820 1823 1826 1829 1832 1835 1838 1841 1844 1847 1850 1853 1856 1859 1862 1865 1868 1871 1874 1877 1880 1883 1886 1889 1892 1895 1898 1901 1904 1907 1910 1913 1916 1919 1922 1925 1928 1931 1934 1937 1940 1943 1946 1949 1952 1955 1958 1961 1964 1967 1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 2009 2012 2015 2018 2021 2024 2027 2030 2033 2036 2039 2042 2045 2048 2051 2054 2057 2060 2063 2066 2069 2072 2075 2078 2081 2084 2087 2090 2093 2096 2099 2102 2105 2108 2111 2114 2117 2120 2123 2126 2129 2132 2135 2138 2141 2144 2147 2150 2153 2156 2159 2162 2165 2168 2171 2174 2177 2180 2183 2186 2189 2192 2195 2198 2201 2204 2207 2210 2213 2216 2219 2222 2225 2228 2231 2234 2237 2240 2243 2246 2249 2252 2255 2258 2261 2264 2267 2270 2273 2276 2279 2282 2285 2288 2291 2294 2297 2300 2303 2306 2309 2312 2315 2318 2321 2324 2327 2330 2333 2336 2339 2342 2345 2348 2351 2354 2357 2360 2363 2366 2369 2372 2375 2378 2381 2384 2387 2390 2393 2396 2399 2402 2405 2408 2411 2414 2417 2420 2423 2426 2429 2432 2435 2438 2441 2444 2447 2450 2453 2456 2459 2462 2465 2468 2471 2474 2477 2480 2483 2486 2489 2492 2495 2498 2501 2504 2507 2510 2513 2516 2519 2522 2525 2528 2531 2534 2537 2540 2543 2546 2549 2552 2555 2558 2561 2564 2567 2570 2573 2576 2579 2582 2585 2588 2591 2594 2597 2600 2603 2606 2609 2612 2615 2618 2621 2624 2627 2630 2633 2636 2639 2642 2645 2648 2651 2654 2657 2660 2663 2666 2669 2672 2675 2678 26

Edgwick Report.
Edgwick P. R. B. Edgwick
25 19 6
76.5 Oct.

Eye Inspection
37.5% OK out of 48 Records

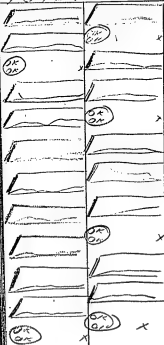
66.6

1691-E

Make 100 blanks 1666 powder
regular all-thorn except hold strain
on only five minutes instead of
six minutes, this is a departure of
1659-E-

7/24/11

1692-E



(259)

Electric Report.
 Ed. and OK. R. C. J. M. W.
 13 10 7 2
 1 11

84.6% OK

Eye Inspections
 17.5% OK out of 230 Pieces

1192-E

Same as 1666 except with
 $\frac{3}{4}$ " rounded head. - Serial 24
 to Miller - This piece as long
 as head is OK.
 Pad bulged out above would require
 the 1661 holder -

4/25/17

169.3-E

[illegible]

5-8.23

1693-E

1693-E
3/4 pad special moulded with
9/16 deep grooves same pattern as regular
set in same holder as 1676.
Make 100 blanks -

Make 100 blanks —

7/34/77

1694-E

Low Spot	FFNS	
Low Gas Spot		FFNS
OK	x	Low Spot
Low Spot	OK	Low Gas Spot
Low Spot	OK	Low Spot
Low Spot	OK	Low Spot
FFNS	OK	Low Spot
OK	x	Low Spot
		FFNS
	OK	Low Spot
	OK	Low Spot
FFNS	OK	
Washed Gas	OK	

High test

1	3
3	10
3	4
4	1
5	3
6	1

2 2 times

Calculated Points

221	2161
2171	220
2261	228

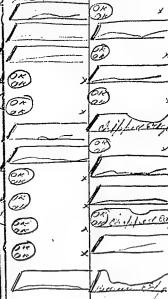
38.8%

1694-E

Print one hundred records (96) regular except operation (6) when mercury reaches line on thermometer (200°F) wait three minutes and then bring pressure up very slowly and leave valve open. (Only 36 printed) ←
See full schedule in back of this book.

7/25/17

1696-E



Drops to L

1.	6
2.	20
3.	9
4.	3
5.	20
6.	18

76 times

oscillations

1696-E

Make 100 blanks 1666-E except
hold steam on press only 4 minutes
instead of six minutes

EXJ

7/35/17

1697-E



Drop test	Calcpoints
1. — 20	.224.1
2. — 20	.228.1
3. — 20	.217
4. — 20	.225.1
5. — 20	.229.1
6. — 20	.215

120 times

40.2%

3 Banks notes of the
American Iron Works

1697-E

Repeat 1684-E but use instead
of $\frac{1}{2}$ topsoil and $\frac{1}{2}$ Norway wood
 $\frac{1}{2}$ barnyard and $\frac{1}{2}$ Norway

7/25/17

1698-E

Drop	test	Caliper	Point
1.	10	.216	
2.	20	.223.1	
3.	3	.218	
4.	8	.203	
5.	3	.213.1	
6.	7	.219	
		51 times	

5 Blanks made after
coming from Brito

38.5%

1698-E

Regular 1666-E powder.

Oil the blank, mould ring with
machine oil, wipe it on with a rag.
Make 24 blanks -
Send all to Miller.

7/25/11

1699-E

Drop test	Calypso Point
1. — 20	227.1
2. — 12	216.1
3. — 20	226
4. — 30	214
5. — 17	226
6. — 13	218

92 times

3 Hands raised
after coming from mass

260

1699-E Figures 1666 to 1670 -
Treat blanks around ring with
"Tanning" solution
Make 24 blanks - send all to
Miller.

7/20/11

1700-E

	Drop test	Initials	Results
OK OK	1. — 20		.221
OK OK	2. — 20		.235.1
OK OK	3. — 10		.234
	4. — 3		.227.1
	5. — 1		.216.1
	6. —		.215.1
	4 Stuns		

I have sent you the enclosed.

40%

1700-E Regular 1666-E Powder -
Same as 1648-E but more lubricious
instead of sil -
only received 1 pound as to
where rest

7/25/17

1701-E-1

1701-E-2

1701-E-~~100~~₂ Aug 1966-E

(1) There 12 regular blanks between 1698 and 1699.

(2) Make 1/2 regular blanks between 1699 and 1700.

To check - send all to Miller.

6911

1702-E

1702-E-C 7/25/77

1702-E

24 blanks made with 1637 tool
operated by machine. $\frac{1}{4}$ inch vertical
stroke adjusted $\frac{1}{4}$ inch below tip of
adapter ring - 16.05 pounds

1782 E.C. 24 blanks made regularly
at the same time with the same
powder.

Send all 48 to Miller for inspection.

L. Hancock Boston and Edg.

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25

57.1%

65%

7/26/17

1704-E

1st Dist

2nd Dist

3rd Dist

4th Dist

5th Dist

6th Dist

7th Dist

8th Dist

9th Dist

10th Dist

11th Dist

12th Dist

13th Dist

14th Dist

15th Dist

16th Dist

17th Dist

18th Dist

19th Dist

20th Dist

21st Dist

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24th Dist

25th Dist

26th Dist

27th Dist

28th Dist

29th Dist

1704-C

2nd Dist

3rd Dist

4th Dist

5th Dist

6th Dist

7th Dist

8th Dist

9th Dist

10th Dist

11th Dist

12th Dist

13th Dist

14th Dist

15th Dist

16th Dist

17th Dist

18th Dist

19th Dist

20th Dist

21st Dist

22nd Dist

23rd Dist

24th Dist

25th Dist

26th Dist

27th Dist

28th Dist

29th Dist

30th Dist

4 Blankes discarded for Kansas City

50%

Blank discarded for Kansas City

1704-E

24 Blankes made on same machine as 1703-E but for 1704-E. Two of 1704-E are rejected at top of adjacent ring 1666-2 for voids.

1704-E-C

24 Blankes same for voids regular work to check.

Edgman Report 1704-E
Edge of Box 12 Edm 1665
16 6 3 1
3 3
9 95%

7/26/17

1725-E

170.5-C

1705-E

Same as 1704-E except
that the ponder is not back
in the hopper, but is caught out
and dropped into the barrel.
weighed out 545 grammes each time.

1705-E-C Regular to China
made out of the source. Also.

45

1782

Have wanted to see you

2/26/72

170.6-E

1706-E-C

1706-E

Same as 1705-E
except that the sample is
collected in the lots of 272½
gms each and each lot is
tamped separately.

1706-E-C is made regular at the same time for check -

The drop test is pretty sure evidence that the two lots were mixed. Also positive proof is that the 1786-E was abnormally thick.

Business conducted in the
morning and afternoon.

Roll test 120 turns

Wipe test
66 times

7/26/77

1707-E

OK

x

OK

x

No drop test

OK

x

Edging Report
Edging at Bedford Mine

6 5 5330, 0.5

OK

x

OK

x

OK

x

OK

x

OK

x

OK

x

OK

x

OK

x

OK

x

OK

x

58%

58%

1707-E Same as 1705-E except
that tool is adjusted 1/2" below
add depth ring and hydraulic
press operation is omitted entirely.
12 blanks made -

1708-E

No Dip Test

Edging Report.
Edged at Redged diox
5 5 100°

41°

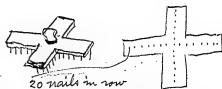
1708-E

Same as 1707 except
that tool is started adjacent $\frac{1}{8}$ inch
below top of adhafter lining and
we remove probe as we advance
is forced up to $\frac{1}{8}$ inch below top of
adhafter lining.

7/26/77

[illegible]

1709-E



Three tools with 3 lengths of nails, Bottom view
After strike off in hopper - regular way,
use first the tool with the long nails
then " " " " Medium "
then " " " " Short "

Turn each around in the powder
three times and lift out.

Then place thin rubber pad on
and proceed in regular way.
Make 24 blanks

3.3%

7/26/77

1710-E

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

Drop test

1. 20 .221

2. 50 .226

3. 50 .232

4. 10 .216

5. 20 .230.1

6. 20 .223

118 times

Edging Report

Edge OK R Edg'd alive

6 4 12

2 20 6

100% OK

1710-E

Make ~~48~~ regular 1666-E Blanks except take the blanks out of the press hot, so that you can just bear your hand on the moulds.

58.30

7/24/17

1711-E

23 22	24	104	104	24	x
	24			24	x
	24	x	24		
	24	x	24	104	104
	24	x	24		
	24				
24	24			24	x
				24	x
				24	x
	104	104			

29.10

Existing Report
Edged (x. V.B. Edged N.)

6 4 2

100%

1711-E








Print 48 records on regular
1666 blankie but put on the
high pressure as slowly as
possible.

Send all to miller

CM

7/28/17

1713-E

	OK	x	Drop test	Califas Perm
	OK	x	1. — 20.	.212.
	OK	x	2. — 20	.204
	OK	x	3. — 4	.221
	OK	x	4. — 20	.213
	OK	x	5. — 20	.206
	OK	x	6. — 20	.214

10 4 times

Edging Report
Edged Wk. ReEdged Wk.

1	6	14	1
4	2	2	
2	8	2	3

72.8% Ok.

1713-E

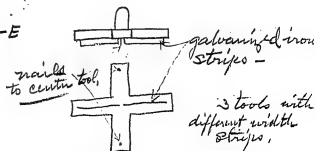
Same as 1712-E except
use 2 pounds water instead
of the straw oil.

7/27/11

1714. E

Drop test	Caliper Points
1. — 20.	.209
2. — 2	.210
3. — 14	.201
4. — 3	.221
5. — 50	.192
6. — 20	.206
79 Points	

1714-E



Use exactly as tools in 1709-E

Only made 18 miles.

7/27/17

1715-E

<u>OK</u>	X	OK	✓	Birds lost	Campfire
<u>OK</u>	X	OK	✓	1 —	.20 .210
<u>OK</u>	X	OK	✓	2 —	.89
<u>OK</u>	X	OK	✓	3 —	.20 .210
<u>OK</u>	X	OK	✓	4 —	.20 .203
<u>OK</u>	X	OK	✓	5 —	.20 .202
<u>OK</u>	X	OK	✓	6 —	.30 .209
<u>OK</u>	X	OK	✓	<u>120 stuns</u>	

1715-E

Same as 1712-2 except use
one pound Rosin oil instead of
Stearn Oil-

Make 24 blanks send to Miller-

Blauies show little Annel's east and
all over.

7/27/17

1717-E

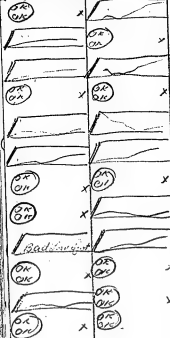
$\frac{OX}{OZ}$	x	$\frac{OX}{OZ}$	x	Prof. test	Calculus Cont.
$\frac{OX}{OZ}$		$\frac{OX}{OZ}$		1. ————	.202
$\frac{OX}{OZ}$	x	$\frac{OX}{OZ}$	x	2. ————	.203
$\frac{OX}{OZ}$		$\frac{OX}{OZ}$		3. ————	.209
$\frac{OX}{OZ}$	x	$\frac{OX}{OZ}$	x	4. ————	.204
$\frac{OX}{OZ}$		$\frac{OX}{OZ}$		5. ————	.205
$\frac{OX}{OZ}$	x	$\frac{OX}{OZ}$	x	6. ————	.207
				120	

1717-E

Same as 1712-E except use one pound Kerosene oil instead of the straw oil.

7/22/17

1718-E



Drop test Caliper Point

1.	30	.310
2.	20	.303
3.	20	.310
4.	20	.300
5.	20	.303
6.	20	.309

120 times

1718-E

Same as 1712, except use
one pound Calcium chloride (approx)
in ~~the~~ solution in water -

make up 24 blanks - send records
to Miller,

7/23/17

1719-E

Drop-test	Calif. as Em.
1. — 2.0	.236
2. — 2.0	.237
3. — 2.0	.244
4. — 2.0	.235
5. — 2.0	.241
6. — 2.0	.229
120	
Rad. Enuff	
54.1%	

1719-E

Same as 1712 except one
one found Rad ammoniac
dissolved in water.

Make up 24 blanks - send records
to Miller.

7/22/17.

1720-E

Drop test	Calculated Points
1 - 20	.226
2 - 20	.218
3 - 20	.212
4 - 28	.218
5 - 20	.212
6 - 20	.213

120 times

120 times

Edging Report
Edged OK. R Edged alone
10 9 1
1 1
18
100% OK

Edgard OK. R. Edgard & Marie

409

$$\frac{1}{10}$$

100% OK

506

1720-E Blount Press schedule -

- 1 Bring to contact - low pressure,
- 2 Steam on - set clock -
- 3 Hydraulic pressure on - $2\frac{1}{2}$ minutes
- 4 after steam,
- 5 Steam off after 4 minutes more,

to Make 48 blanks send all
to Miller -

7/27/17

1721-E

		Drop test	Calif. Test
		1. — 20	.207
		2. — 20	.216
	x	3. — 20	.207
	x	4. — 20	.202
	x	5. — 20	.221
	x	6. — 20	.209
		120	

Edging Report
Edging OK. B. Edging OK.

10 7 3
3 3
10

100% OK

45.8%

1721-E Blank Press Schedule -

- 1 Bring to contact - low pressure
- 2 Steam on - set clocks
- 3 Hydraulic pressure on 4 minutes after steam,
- 4 Steam off after 4 minutes more,
- 5 Remove from press warm,

Make 48 blanks - send all records thru to Miller,

and several preceding -
This experiment shows by drop test that the parallel cracks have nothing to do with the strength of the blank.

$7/23/77$

1722-E

Drop test. Calipers	
1. — 26	.222
2. — 20	.211
3. — 20	.205
4. — 20	.223
5. — 20	.207
6. — 20	.215
120 times	

Edging Report
Edging On & Edging down

$$\begin{array}{r} 12 \\ 4 \\ 1 \end{array} \begin{array}{r} 8 \\ 3 \\ 1 \end{array} \begin{array}{r} 4 \\ 1 \\ \end{array}$$

100% ✓

53.8^c

1722-E

Blank Press Schedule -

1. Bring to contact - low pressure
2. Steam on - set clocks -
3. Hydraulic pressure on 4 min after steam,
4. Steam off after three minutes more,
5. Remove from press wash,

Make 48 send all them
to Miller,

High dropped in this experiment and the two previous - and also other experiments with oil etc indicate some other change in powder - other than what is done in the experiments, $\frac{1}{2}$ 2/1/3 due to different wood flour - ?

7/27/17

1723-E



Drop test	Caliper Point
1. — 20	.252
2. — 20	.215
3. — 20	.239
4. — 20	.215
5. — 20	.232
6. — 20	.231
	1.80

1723-E

Use the moulded perforated thin pad with American Felt Co Felt laid on top. Reg 1660 in every other respect.

(3.3%)

7/28/11

1724-E

OR QA	x	OR QA	x
FFRS		OR QA	x
OR QA	y	OR QA	x
OR QA	x	OR QA	x
OR QA	x	OR QA	x
OR QA	x	OR QA	x
OR QA	x	OR QA	x
OR QA	y	FFRS	
OR QA	x		
OR QA	x	OR QA	y
OR QA	x	OR QA	y
		OR QA	x
OR QA	x	OR QA	x

Drop test	Califeco Pen.
1. — 20	.210
2. — 20	.199
3. — 20	.193.1
4. — 20	.205
5. — 20	.196
6. — 20	.207

120 turns

h
h
h

1724-E

Repeat 1712-E using stronger
to spray the oil into the mixer.

1725-E



66°

Drop Test		Surface Area
x	1 - 20	.311
x	2 - 20	.304
x	3 - 20	.199.1
x	4 - 17	.221
x	5 - 20	.13.1
x	6 - 3	.217
99 units		

7/28/77

1725-E

Repeat 1717-E using
atomized to show the cast into
the embryo known

$7/25/11$

1726-E

x/Hack Lin C

Carrollton

1-20

224.

 $q = 1.5$

199.1

9-20

173

۵ - تہ - ۷

203.

5-4

3/2

6-10

227

87 times

1726-E

Make one ³drier full of 1666-E powder regular except add 18 pounds straw oil to one drum of varnish -

Printed on 21. 11. 19

75/10

city

7/25/11

1727-£

$\frac{1}{2}$	x	$\frac{1}{2}$	y	Drops test	Califisco Pen:
OK OK		OK OK		1. — 20	.301.
OK OK		OK OK		2. — 20	.193.1
OK OK	x	OK OK		3. — 20	.188
		OK OK	x	4. — 20	.205.1
				5. — 20	.210
				6. — 20	.174.1

120 times

1727-E

Repeat 1712 using large
atomizer and compressed air,
300 lbs powder
3/4 lbs ~~the~~ straw oil in
atomizer - Run mixer 5 min
after all oil is atomized,

7/28/17

1728-E

Drop test	Caliber	Point
1	20	.209
2	12	.215
3	20	.208.1
4	20	.215
5	20	.199.1
6	20	.203
112 times		

(83³⁰)

-1728-E

Repeat 1717-E except use
large atomizer on compressed air
300 lbs powder
3/4 lb Kerosene atomizer
Run mixer 5 min after all
oil is atomized.
Large Day Museum.

CHS

7/30/17

1729-E

FERNS

OK 210

OK 210

Bad Fire Bird

OK 210

OK 210

OK 210

OK 210

OK 210

OK 210

OK 210

OK 210

OK 210

OK 210

Bad Fire Bird

OK 210

OK 210

(33)

Drops test Caliper Point

1. — 20 .210

2. — 20 .213.1

3. — 16 .199.1

4. — 20 .235

5. — 20 .203.1

6. — 20 .233

116 times

1729-E

Same as 1724-E except use
one pound light machine oil -

Plauder show up little better

7/30/17.

1730-E

Drugs Test	Calypso
1 — 20	203.1
2 — 50	216
3 — 50	195.1
4 — 50	233
5 — 20	225
6 — 50	212.1

120 times

95.8°





























1730-E

~~1730-E~~ 1730-E
Same as 1724-E except use
one pound oleic acid.

(Blanks) show a low water level.

7/30/17

1731-E

	x		No. of test
			1 — 20
			2 — 10
	x		x3 — 20
			4 — 20
			5 — 2
			x6 — 20
			7 2 tests
	x		
			
	x		
			
			
			

1731-E

Same as 1724 except use
one pound liquid carbolic acid.
Use great care not to get
burned with the acid, and
also watch the powder very
carefully so that no one is
burned with it.

7/30/17

1732-E

Drop test	Weight (lb)
1	20
2	30
3	26
4	30
5	30
6	20
	<u>120</u>

$$7 \frac{1}{2} \frac{1}{2}$$

1732-E Repeat 1723 - make 500
blanks

497 records inspected.
49 rough spots.
18 low spots.
192 parallel cks
3 mixed.
3 stain.
2 Vancou.
2 mixed.
2, P.O.
1 dent.
2 stain.
total 48% OK.

7/30/17

1733-E

1/35		Roof test		Calypso Point	
2A	x	1	20		.220/
2A	x	3	20		.219
2A	x	5	13		.221
2A	x	4	4		.217/
2A	x	5	20		.213
2A	x	6	18		.224/

87 turns

1733-E

Select 100 regular blanks that extract
free - that show no signs of requiring
great force to get them out.

69.55

7/30/11

1734-E

$\frac{DA}{DB}$	x	$\frac{DA}{DB}$	x	Map test
				1 — 26
$\frac{DA}{DB}$	x	$\frac{DA}{DB}$		2 — 26
$\frac{DA}{DB}$	x	$\frac{DA}{DB}$		3 — 26
$\frac{DA}{DB}$	x	$\frac{DA}{DB}$		4 — 28
		$\frac{DA}{DB}$	x	5 — 28
		$\frac{DA}{DB}$		6 — 20
				170

1734-E 100 blanks.

1734-E: 100 blanks;
Select the blanks that seem to
stick in the moulds or show the
greatest force required to extract at
the same time that 1733-E are
being selected -

7/30/11

1735-E

	x		<i>Drop test</i>
	x	1 - 20	
	x	2 - 20	
	x	3 - 11	
	x	4 - 17	
	x	5 - 20	
		6 - 20	
			<u>18 times</u>

1735-E

Make one drier full -

60 lbs wood -

40 lbs chalk -

12 lbs Rosin

2 lbs gas black-

→ 60 lbs alcohol
make regular all them

make regular all them

16 bags - 12 1/2 bags from grinder.

ground 76% 180, 57% 350

7/30/17

1737-E

Time	Activity	Notes
01:00	Start	
01:15	Start	
01:30	Start	
01:45	Start	
02:00	Start	
02:15	Start	
02:30	Start	
02:45	Start	
03:00	Start	
03:15	Start	
03:30	Start	
03:45	Start	
04:00	Start	
04:15	Start	
04:30	Start	
04:45	Start	
05:00	Start	
05:15	Start	
05:30	Start	
05:45	Start	
06:00	Start	
06:15	Start	
06:30	Start	
06:45	Start	
07:00	Start	
07:15	Start	
07:30	Start	
07:45	Start	
08:00	Start	
08:15	Start	
08:30	Start	
08:45	Start	
09:00	Start	
09:15	Start	
09:30	Start	
09:45	Start	
10:00	Start	
10:15	Start	
10:30	Start	
10:45	Start	
11:00	Start	
11:15	Start	
11:30	Start	
11:45	Start	
12:00	Start	
12:15	Start	
12:30	Start	
12:45	Start	
13:00	Start	
13:15	Start	
13:30	Start	
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20:30	Start	
20:45	Start	
21:00	Start	
21:15	Start	
21:30	Start	
21:45	Start	
22:00	Start	
22:15	Start	
22:30	Start	
22:45	Start	
23:00	Start	
23:15	Start	
23:30	Start	
23:45	Start	
24:00	Start	

93 times

91.6%

1737-E

1737-E
Same as 1666-E except mixed
like 1736-E

14 bags before grinding 11 bags after grinding
after screening. 1 bag tailings.

ground 75% 180 57% 350

Screened 98% 180 83% 350

1737-E Duplicate

7/31/17

[illegible]

68.5°

7/30/11

1738-E

Drop test	Calculus Test
1 - 20	.219
2 - 20	.227
3 - 20	.231
4 - 18	.218
5 - 4	.227
6 - 20	.231

102 tubes

102 times

Same proportions as 1666-E

1738-E

Three large micros made July 29-17

3 x 60 lbs wood flower. 180 lbs

3 x 62 lb gun (4.2 inch) 186 lbs (36 min)

Mixed 10 minutes - (150.000000)

add chalk then 8 more green.

3 x 40 lbs - 120 lbs

Runned 10 min

add Lamp black 6 lbs.

Mixed 10 min

Dry grind screen regular -

Would varnish sprout regular -

but after July 30 this powder regular
but dried on 1508 schedule (2 hours)

50%

Q1651

7/31/17

7.39. E

			Depth	Test	Caliper Print
2A	X	2A		20	.233/
2A		2A	X	1. —	.238
2A	X	2A		20	.231/
2A		2A	X	3. —	.219
2A	X	2A		4. —	.210/
2A		2A	X	5. —	.221
2A	X	2A		6. —	
2A		2A			120 turns

1739-E Dried only 1h 45m
otherwise same as 1738-E

otherwise rank as 1738-E

522 eye inspected.

102 parallel cracks.

7 rough spots.

10 maps.

8 stains.

8 miscellaneous.

135 Total discards.

total 74% O.K.

86.9

7/31/17

1742-E.

Prof. test.	
1. — 14	196
2. — 20	203.5
3. — 30	211
4. — 20	200
5. — 10	20
6. — 5	195

1742 Σ Bowl about 300 (regular
1666 Blanco) very slowly so that
diamond takes a very shall cut
and runs no risk of straining
the edge - Print 24 regular
and send to Miller - Hold others
for experiments.

1743-E Make 100 blanks 1738 powder
 dried on 2 hour schedule
~~pressed~~ Moulded regular -
 Pressed 7min with steam
 an instead of 6min -
 Varnished and printed regular
 send 24 to Miller -

8/2/17

1744-E

$\frac{2}{2} \times$	$\frac{2}{2}$	x	Ang's Est	Calgary Can.	
$\frac{2}{2}$	$\frac{2}{2}$	x	1. —	20	2000
$\frac{2}{2}$	$\frac{2}{2}$	x	2. —	80	2000
$\frac{2}{2}$	$\frac{2}{2}$	x	3. —	8	2000
$\frac{2}{2}$	$\frac{2}{2}$	x	4. —	12	2000
$\frac{2}{2}$	$\frac{2}{2}$	x	5. —	10	2000
$\frac{2}{2}$	$\frac{2}{2}$	x	6. —	4	2000
$\frac{2}{2}$	$\frac{2}{2}$		<i>J. H. Lewis</i>		

2. *Therapsid* *Arctura* *Arctura*
Dormant, 1890.

 a^b

1744-E Make one drier full
of 1738 powder dried
only one and a half hours.
Ward varnish and print
regular but save ^{possibly for} 100
blanks for 1745-E
send 24 records to Miller
save ~~24~~ 100 blanks for other
experiments.

Quilt 200 600 lbs processed.
~~8/1/17~~ ~~266~~ 489 records inspected. }
 42 70 Parallel chs. } eye
 7 9 Strains.
 12 158 rough spots.
 3 miscellaneous. }
 15 8 snags } machine.
 1 17 low print.
 15 rough spots
 4 misc.
 9 rough spots.
 25 low spots.
 14 4 miscellaneous.
 2 dusts
 Total 69% OK
 Total 42% OK

5/2/11

1745-E

Sample	Depth	Time	Notes
OK	0.5	1	5
OK	0.5	2	20
OK	0.5	3	20
OK	0.5	4	20
OK	0.5	5	20
OK	0.5	6	30
OK	0.5	7	30
OK	0.5	8	30
OK	0.5	9	30
OK	0.5	10	30
OK	0.5	11	30
OK	0.5	12	30
OK	0.5	13	30
OK	0.5	14	30
OK	0.5	15	30
OK	0.5	16	30
OK	0.5	17	30
OK	0.5	18	30
OK	0.5	19	30
OK	0.5	20	30
OK	0.5	21	30
OK	0.5	22	30
OK	0.5	23	30
OK	0.5	24	30
OK	0.5	25	30
OK	0.5	26	30
OK	0.5	27	30
OK	0.5	28	30
OK	0.5	29	30
OK	0.5	30	30

1747-E

Edge 24 blanks with very
large bevel to make a sharp edge
in center -
varnish and print regular
send to Mills.

20
20
20
20
20
20

150

226} 019
210} 022
226} 012
202} 023
231} 023
216} 023
226} 015
312} 021
224} 021
219} 021

signing report on 24 records
85% OK.

100%

1749-E

Print 100 records having
steam on for 2 minutes longer
time - inspect for stains -
etc and send detail report
to Miller,

Report from Kennedy -

96 records 52 OK,

44 records { 19 parallel obs.

2 maps,

23 rough spots

96

54 1/2 % OK.

Page 100 8/13/17

1746-E

Goodly Blk Runway

Shoreline

500 lbs Bld. Runway

1746-E



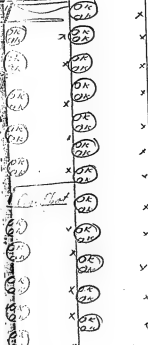
83%

75%

100% 91%

8/14/17

1746-E



83%

100%

Schedule of Operations Rec'd. Press

1. Look press over and be sure it is in
shape.
2. Don't forget to hook truck
to press before entering moulds
in press.
3. Give moulds up, and be sure
there is a pin in every Mould,
and that there is, nothing hung
on Moulds, such as parts of
clamps or pins which will
moulds and platens of press.
4. Bring moulds up to contact
carefully and very slowly, nearly
just off pin.
5. Turn ^{on} Steam.
6. When mercury reaches fig on
thermometer (206°F) bring high
pressure up very slowly and leave
valve open.
7. Set your clock and let moulds rest
in full steam and pressure for two
(2) minutes; be sure to blow your
press out when on steam after two

←

(2) minutes, and again after six
(6) more minutes for about one-half
minute.

8. Turn off steam and let steam
exhaust from press.

9. Turn on water.

10. When Moulds are cold, to truck,
turn off cooling water, close high
pressure hydraulic valve, open up
hydraulic exhaust valve to relax
press.

11. Hook Truck to press, transfer
moulds from press to truck. Do
not turn Moulds out of press with
one pull, but throw in truck
by hand, counting moulds so as
not to miss any as they will
fall to the floor when taking the
truck from the press.

Remitted to Benin in 1841

July

16 7.00
17 14.25
18 15.34
19 15.30
20 12.00
21 44.62
Sunday.
22 7.06
24 5.15
25 11.13

Report on 1841

July 1841

1 15.07 14.20 1.85
2 1.29 15.20 1.91
3 13.62 15.13 1.51
4 14.13 14.30 1.17
5 14.56 11.97 2.59
6 5.12 5.69 1.57
7 5.11 5.61 1.50
8 5.11 5.61 1.50
9 5.11 5.61 1.50
10 5.11 5.61 1.50
11 5.11 5.61 1.50
12 5.11 5.61 1.50
13 5.11 5.61 1.50
14 5.11 5.61 1.50
15 5.11 5.61 1.50
16 5.11 5.61 1.50
17 5.11 5.61 1.50
18 5.11 5.61 1.50
19 5.11 5.61 1.50
20 5.11 5.61 1.50
21 5.11 5.61 1.50
22 5.11 5.61 1.50
23 5.11 5.61 1.50
24 5.11 5.61 1.50
25 5.11 5.61 1.50
26 5.11 5.61 1.50
27 5.11 5.61 1.50
28 5.11 5.61 1.50
29 5.11 5.61 1.50
30 5.11 5.61 1.50
31 5.11 5.61 1.50

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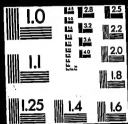
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